City of Beverly Harbor Management Plan



Prepared for

The City of Beverly, Massachusetts Beverly Harbor Management Authority

Prepared by

The Cecil Group

July 16, 2002

Table of Contents

Executive Summary.	<u>iii</u>
I. Introduction	1
II. Goals, Objectives and Recommendations	2
Recommendations to Support the Goals and Objectives	2
III. Process for Harbor Plan Development	8
1.Introduction.	<u>8</u>
1.Previous Studies	
2.Public Participation	13
3.Researchers and Consultants	13
IV. Harbor Overview	<u>14</u>
1.Geographic Setting	
1.Harbor Planning Areas	<u>14</u>
2.General City History	
3.Historic Development of the Harbor	20
4.Extent of Jurisdiction	23
V. Inventory and Analysis of Existing Conditions	
1.Inventory of Historic Resources	<u>28</u>
1.Marine Waterfront and Harbor Facilities	
2.Harbor Transportation and Circulation	30
3.Harbor Infrastructure	32
4.Natural Resources	33
5.Scenic Resources and Unique Environments	35
6.Pubic Access	36
7.Commercial Activities: Fishing, Lobstering, Cruise Boat, Water Taxi	
8.Boating and Public Safety	40
9.Multiple Use Inventory	
VI. Federal, State, and Local Consistency	
1.Massachusetts CZM Policies and Tidelands Policy Objectives (301 CMR 23.03f)	43
1.Relevant Chapter 91 Waterways Regulations	44
Appendix I. Designated Port Areas.	48
Designated Port Area	

EXECUTIVE SUMMARY

The Beverly Harbor Management Plan is prepared to provide key actions and goals that the City of Beverly should implement to assure the improvement and long-term success of the harbor front and associated resources.

A series of goals and actions to improve the land and water resources of the Harbor was defined as part of the planning process. The key goals are:

- Maximize recreational boating.
- Maintain facilities for Beverly's commercial fishing fleet.
- Create a Washington's Navel Base museum and visitors information center.
- Provide docking facilities for a replica of the armed schooner Hannah when construction of the vessel is completed.
- Provide waterfront walkways and pedestrian access along the Inner Harbor, Bass River, and Cumming's Pond.
- Foster landside development along the Inner Harbor and Bass River that incorporates public access amenities and retail businesses and attract the public.
- Preserve and enhance harbor anchorages, harbor navigation aids, harbor navigability.
- Provide docking facilities for commercial tour, cruise, charter, and water taxi vessels.
- Revitalize city-owned parcels at the Veteran's Memorial Bridge
- Evaluate the feasibility of dredging the Bass River, at the Ventron Site, and at the city-owned parcels at the Veteran's Memorial Bridge.
- Alleviate parking shortfalls by connecting the Ventron site via direct pedestrian access to the city-owned property east of Veterans Memorial Bridge and utilize a portion of this site for public parking.
- Revise the zoning ordinances to be responsive to these objectives.
- Eliminate the Designated Port Area designation once zoning changes have been implemented.

Additional issues addressed in this Plan include storm water management, multiple-use developments, protection of natural resources, and water and sediment quality.

The plan was prepared under the direction of the Beverly Harbor Management Authority with the assistance of the City Harbormaster and City Planning Director. The plan was developed simultaneously with the City's Master Plan Update and the City's Open Space and Recreation Plan Update. Consequently, much of the public input and participation was accumulated from the public forums for each project and from the work of the Master Plan Steering and Open Space and Recreation Committees.

I. INTRODUCTION

The Beverly Harbor Management Plan was developed to provide an active, productive, and clean coastal environment. The Beverly Harbor Master Plan identifies the key actions the City of Beverly should take to assure the long-term success and improvement of Beverly Harbor.

The Harbor Management Plan is structured with the following sections:

• I. Introduction

• II. Goals, Objectives, and Recommendations

The Goals, Objectives, and Policies promoted by this Plan are presented in this section. Each of the components that make up the harbor is presented in terms of the desired outcome for the City of Beverly.

• III. Process for Harbor Plan Development

This section describes the processes that were used to create this Plan. The Plan was based on the findings of the many planning efforts which have been undertaken over the last 20 years in conjunction with the most recent efforts of the Harbor Management Authority and those of the individuals who participated in the widely-publicized master plan and open space plan meetings, which became integral to the Harbor Management Plan.

IV. Harbor Overview

A definition of the Harbor that separates the resource into three pieces is provided, and an overview of conditions in the Harbor follows. Some of the data and analysis that has been available on the City's coastal resources is also included.

V. Inventory and Analysis of Existing Conditions

The complex jurisdictional issues that apply to all coastal areas are described as a means to show where potential conflicts may occur regarding land and water use decisions.

VI. Federal, State, and Local Consistency

This section lists the state and regional policies that are relevant to the Beverly Harbor Plan. These policies provide the framework for intergovernmental consistency in the implementation of the Plan.

II. GOALS, OBJECTIVES AND RECOMMENDATIONS

Recommendations to Support the Goals and Objectives

The broader goals and objectives for the Beverly waterfront and harbor were presented at the beginning of this plan. The following sections describe the overall direction in each area and the specific ideas and recommendations proposed for the Beverly waterfront. These ideas are not mutually exclusive, and in some cases, overlap the proposed actions.

A. Maximize recreational boating potential.

- Upgrade waterside and landside facilities at the only two city marina's and the public pier.
- Evaluate dredging to support expanded boating activities.
- Evaluate the feasibility of creating additional slips and/or moorings at the Ventron property, in the Bass River, and at the city marinas.
- Evaluate a boat launch ramp on a portion of the Ventron property.
- Rezone for waterside development of the lower Bass River and Ventron property.
- Transfer to city ownership parking for fishermen and public under Veteran's Memorial Bridge.
- Improve the Hall-Whittaker bridge for traffic, pedestrians, and fishing access.
- New areas proposed for moorings will be subject to the review and decisions of the Harbormaster.
- New slips constructed by private entities will be subject to conditions of approval by the local land use boards to ensure an equitable distribution of a portion of the slips to the general public.
- The boundaries of permanent mooring locations will be expanded within the areas outside of the Inner Harbor and Bass River.
- Support development of new facilities on the Bass River.

B. Maintain facilities for Beverly's commercial fishing fleet.

- Upgrade the existing facilities at the city owned commercial marina with new floats and a better float layout.
- Evaluate the feasibility of creating additional commercial slips at the Ventron Property.
- Rezone for waterside development of lower Bass River and Ventron property.
- Transfer to city ownership parking for fishermen and public under Veteran's Memorial Bridge.
- Adjacent and nearby properties to the commercial marina will be used to support the landbased operations on a shared basis with recreational and other activities as appropriate.

C. Create a Washington's Navel Base museum and visitors center.

- Utilize a portion of the owned property adjacent to the Veteran's Memorial Bridge for a visitors center and museum.
- Focus the museum on the site's rich history as General Washington's navel base during the Revolutionary War, the story of the armed schooners that sailed out of Beverly, and Beverly's role as a repository for captured British ships.

D. Provide docking facilities for a replica of the armed schooner Hannah when construction of the vessel is completed.

 Civic groups are fund raising to support construction of a replica of the armed schooner Hannah; which sailed out of Beverly and was the first ship in Washington's Continental Navy.
 When the vessel is constructed, provide dock space at the City Landing in proximity to the museum and visitors center to serve as a catalyst to bring residents and visitors to the harbor.

E. Provide waterfront walkways and pedestrian access along the Inner Harbor, Bass River, and Cumming's Ponds

- Continue to create public access and water edge walkways, parcel by parcel, as Massachusetts state law (Chapter 91), local zoning regulations, and city land acquisitions come into play.
- Ultimately, create continuous public walkways along the water's edge starting with the Cumming's ponds, continuing south on both sides of the upper Bass River, connecting to the east side of the lower Bass River at Bridge Street, then running from there along the coastline around the Ventron property and up to the Jubilee Yacht Club.
- Rezone along the Inner Harbor and Bass River to require public access and waterfront walkways.
- Provide pedestrian connections to Bass River as part of the redevelopment of the train station and the waterfront properties.
- Provide public access under the Veteran's Memorial Bridge to the city property on its eastern side.
- Connect public access ways along the waterfront from Cummings Park to Lynch Park.
- Pursue the waterfront walkway in accordance with the Open Space and Recreation Plan.

F. Foster landside development along the Inner Harbor and Bass River that incorporates public access amenities and retail businesses that attract the public.

Inner Harbor and Bass River

- Redefine the waterfront district to include all the land area adjacent to the shoreline from the head of the Bass River, along its eastern side, around the point at the Ventron property and up the coast to the to the Jubilee Yacht Club.
- Within the redefined waterfront district, define sub-districts that reflect the character of each neighborhood.
- Rezone to foster the desired landside development as appropriate for each of the following areas:

Inner Harbor

- Require public access along the inner harbor and prepare a list of desired land uses and development standards. Put in place before changes in the DPA.
- Create a Marine Zone at Beverly Port Marina and Jubilee Yacht Club
- Change he zoning of the Ventron Site to mixed use and specifically allow activities related to waterfront uses; particularly commercial and recreational boating and public access.
- Zone Tuck's Point condos as RHD or RMD.

- Encourage continued development of marinas and activities such as boating, public access, tourism (potential whale watch, harbor tours).
- Redevelop Ferry Landing as described in items 1.I below.
- Place a mixed-use zoning district along the Bass River extending inland to Rantoul Street. It
 would allow residential development at a medium density, and require commercial space on
 the first floor and public access along the waterfront.

Bass River

- Develop higher-value land uses by phasing out industrial and warehouse uses in IG district with new zoning classifications.
- Rezone the General Industrial, IG zone for mixed use. Support as necessary with residential
 uses as the principal use, ground floor commercial uses to attract the public, significant public
 access, and waterfront uses.
- Rezone the General Commercial, CG zones, with design requirements for views and protection of boating facilities and improvement of public access.
- Ensure waterfront developments provide adequate parking.
- The commercial waterfront and landside areas will be developed with mixed uses including
 public walkways that can be accessed from the street, boating and fishing support facilities,
 first floor civic, commercial and retail space that draws people to the waterfront, together with
 residential development.

G. Preserve and enhance harbor anchorages, harbor navigation aids and harbor navigability.

- Capitalize on the federal channel to bring tour boats and smaller cruise boats to the public pier.
- Enforce existing regulations to prevent encroachment of slips and moorings into the federal channel, and protect the channel for navigation.
- Continue to maintain all aids to navigation within the approaches to the harbor and up the Bass River.
- Protect existing anchorages for boat moorings.
- Expand anchorages and number of moorings within anchorages as deemed safe by, and subject to the review of the Harbormaster.
- Require close coordination between the Harbormaster and the Harbor Authority on access to the waterfront, moorings, safety and expansion of waterside facilities within the harbor area.

H. Provide docking facilities for commercial tour, cruise, charter and water taxi vessels.

- Utilize the public pier for docking cruise, charter, tour, and taxi vessels.
- Add handicap access ramps and more robust fendering to the pier.
- Supported commercial boating operations will include ferry service, cruise and charter boats, whale watching, sport fishing and water taxi.

- Dock space for the most active uses, including commercial boating, should be sited at the City Landing.
- Additional dock space is required and planned for the end of the public pier.
- Provide dock space at the City Landing for a replica of the schooner Hannah when construction of the vessel is completed.

I. Revitalize the city-owned parcels at the Veteran's Memorial Bridge.

- Upgrade the floats at the two marinas.
- Repair the sea walls.
- Provide more robust fendering for the public pier.
- Add handicap access ramps.
- Provide a new harbormaster/marina manager building.
- Provide a new building for maritime museum and restaurant.
- Create public park and waterfront access.

J. Evaluate feasibility of dredging the Bass River, at the Ventron site, and at the cityowned parcels at the Veteran's Memorial Bridge.

 Dredging to create additional recreational and/or commercial boating opportunities is proposed at the Ventron site and along the eastern side of the Bass River below the Bridge Street. Dredging the upper reaches of Bass River for recreational boating is proposed for a following phase of a phased dredging program.

K. Utilize a portion of the Ventron site for public parking

- Connect the Ventron site via direct pedestrian access to city-owned property east of Veteran's Memorial Bridge.
- Utilize a portion of the site for public parking to address the critical issue of lack of parking in the inner harbor area..

L. Revise the zoning ordinances to be responsive to these objectives

• Coordinate with the City Planning Board to include harbor management objectives in the comprehensive rezoning proposed for the city master plan.

M. Eliminate the Designated Port Area designation once zoning changes have been implemented.

 New zoning is proposed to create new waterfront districts that provide protection for water dependent uses, require public access for new development, and allow non-industrial uses. After establishing the new zoning, the Designated Port Area, which limits development to maritime industrial uses, can be reviewed for elimination. This is particularly important where the city plans for development of tourism and significant public access may be limited by, and is inconsistent with, the existing DPA designation.

 Petition the CZM, EOEA and state legislature to remove the DPA designation after the zoning is in place.

N. Preserve, protect, and enhance the natural land and water resources in and around the harbor.

Regulation of Resources

- The environmental agencies and land use boards will be supported in decisions that balance natural resource protection with development and utilization of the waterfront.
- No net loss of wetland resources will be acceptable, with the exception of mud flats, where past and future sedimentation creates a loss of water sheet area use for boating.

Water Quality

Water quality must be improved to provide long-term stability to the natural resources, provide an environment that is conducive to fishing and swimming, and reduce the impacts to sediment quality within the Inner Harbor and the Bass River.

- Prevention of future pollution should be managed by controlling storm water runoff quality and responding appropriately to spills and accidents.
- Regular testing should continue to determine not only swimming conditions, but also conditions conducive to fisheries.
- The construction of new boating facilities will include consideration of requirements for pump-out facilities, wash areas, materials handling, and water runoff management.

Sediment Quality

Sediment quality impacts the ability for dredging to create new boating facilities. Several actions can be considered to address this issue.

- Prevention of future pollution should be managed by controlling storm water runoff and responding appropriately to spills and accidents.
- Existing polluted sediments that may be appropriate for dredging should be managed with a
 dredging program that includes options for subsidence dredging, and local landfill placement for
 reducing development costs.

Accidental Spills

Accidental spills will inevitably happen where people are actively using machines and facilities. The keys to prevention will be improved education and response.

The public must be educated on the proper response to notify authorities in the event of a spill.

• The local response agencies: Harbormaster, Police and Fire Departments, must be provided with, and regularly update, the necessary equipment for emergency response.

O. Ensure that storm management issues are addressed and requirements are met.

- Protect valued property within the flood hazard zones by following federal and state flood hazard mitigation regulations and programs.
- Improve storm water systems by retrofitting for environmental management and reconstruction to reduce inland flooding.

P. Ensure that the harbor's resources allow for multiple uses and support waterdependent and recreational activities.

Sandy Point/Mackerel Cove to the Islands

- Improve water quality for swimming and fishing by improving the storm water runoff systems.
- Map locations of natural resources for public information.
- Provide local access for recreational fishing/boating.
- Expand boundaries for moorings when reasonable.
- Maintain or improve streets for pedestrian/bike access.
- Provide access for a commercial operator to run day trips to the harbor islands (from the Inner Harbor).

Danvers to Bass River

- Improve water quality with improvements to storm water runoff systems.
- Map locations of natural resources for public information.
- Provide local access for fishing/boating.
- Maintain or improve streets for pedestrian/bike access.

Inner Harbor

The commercial waterfront and landside areas will be developed with mixed uses, including public
walkways, that can be accessed from the street, boating and fishing support facilities, first floor
civic, commercial and retail space that draws people to the waterfront, together with residential
development.

Bass River

 Push for reuse of the 'power company' property but consider other private sites and alternatives to stimulate redevelopment.

III. PROCESS FOR HARBOR PLAN DEVELOPMENT

1. Introduction

The process for developing the Harbor Management Plan has actually been on going for about 20 years. It has included numerous public meetings and special studies, and has resulted in several of documents that identify a series of goals, objectives, issues and concepts for managing Beverly Harbor. The following discussion summarizes many of the previous studies and how they assisted in the creation of this plan.

1. Previous Studies

A wealth of information about Beverly is documented in previous studies that provide a good basis for updating the Master Plan. The key planning studies that address the harbor are listed below:

Beverly Harbor Redevelopment Plan—This plan, published in the 1970s, emphasized the necessity to construct a public pier, provide a pedestrian walkway along the waterfront, extend public access wherever possible, create adequate parking and provide a waterfront attraction based upon Beverly's history as the birthplace of the United States Navy.

Beverly Waterfront Revitalization—This plan, published in 1981, also stressed the need for more pedestrian access to the waterfront and harbor area as well as marine-related business and additional parking.

Bass River Master Plan Study, Final Summary Report—This plan, completed by City Design Collaborative in 1982, focused on some key properties for redevelopment to improve the Bass River. The plan did not recognize any change at the head of the river, but did recommend other improvements. These included:

- Streetscape improvements on River Street
- A new City park at end of Dock Lane
- Relocation of a marina near the MBTA Railroad station
- Public access on the west side of the River
- A major land swap and development project above Bridge Street to provide substantial public access on the northwest section of the river
- Feasibility of dredging areas of the river to increase boating access
- Revitalization strategies for the shorefront properties

Beverly Harbor Public Improvements Plan—The City prepared this plan in 1985 through the State Coastal Facilities Improvement Program for the Inner Harbor waterfront. The plan provided for a public pier and a two-story public facilities building to house the Harbormaster's office, storage, and public rest rooms.

Beverly Master Plan Update—Completed in 1986, the Master Plan Update recommended the preparation of a comprehensive harbor management plan to address specifically waterfront and waterside activities such as marinas, dockage, and moorings. The plan also recommended improved transportation circulation in the waterfront area and changes in the zoning ordinance to encourage greater public access to the waterfront.

Preliminary Request for A Scope for a Harbor Management Plan—This request was made in 1993 and was based upon the Harbor Planning Guidelines. However, this request did not satisfy Massachusetts Coastal Zone Management requirements.

Draft Request for a Scope—This document was prepared in 1995 by the Harbor Management Authority with guidance from staff at MCZM. This document addressed the Harbor Planning Guidelines as prepared by MCZM, which reviewed the draft and identified areas for improvement.

City of Beverly Open Space and Recreation Plan Update—This plan was created in 1995 to ensure the City's eligibility for state funding for open space acquisition and recreational area improvements. The update coincided with the required five-year schedule and included:

- Identification of areas potentially suitable for recreational use but currently unavailable,
- Utilization as a tool to increase public access and identification of suitable uses that met the recreational needs of Beverly's citizens,
- A basis for assessing recreation and open space deficiencies,
- A basis for linking the open space parcels in Beverly as a coherent network of passive recreation areas and play fields.
- An initial step in the process of identifying priorities for conservation, and pursuing funding for open space and conservation land acquisitions, and
- A potential to link Beverly's open space inventory to a regional open space and bikeway system network.

It was noted that the development of an integrated open space system could provide a variety of recreation activities throughout the City, including a potential to meet the need for additional waterfront access and water-related recreation opportunities.

Harbor Management Plan—This plan, prepared by the Beverly Harbor Planning Group in 1998, includes an inventory of harbor uses and resources that was the basis for the information included in this plan, and goals and objectives for the harbor. The Goals and Objectives were as follows:

- Greater opportunity for public access and use, including tourism,
- Increase capacity for berths and moorings, and commercial facilities.
- Appropriate use of the key Inner Harbor parcels, and
- Consider appropriate uses and change for the Inner Harbor.

City of Beverly Master Plan Goals and Objectives Study—This was a public outreach and participation process undertaken by the City of Beverly's Planning Department in 1998 with the assistance of Appledore Engineering Inc. It formulated a vision for the Master Plan update and established goals and objectives.

As a result of the process, an overall community vision and eight community goals were proposed. Most of the goals enhance the quality of life in the community by maintaining, protecting and conserving many of the City's resources including its housing, waterfront, and recreational and natural resources while improving the transportation network and economic base. In terms of the latter, improvement of the waterfront and continual revitalization of downtown Beverly are key objectives.

The results from the responses to a Community Attitude Survey were also tabulated in the study. Approximately 750 to 800 surveys were randomly distributed to Beverly households and citizens, of which

376 were returned, representing roughly 24 percent of the 15,700 Beverly households in 1999. Some key priorities identified from the survey include:

- Future investment for improving roads/infrastructure and for acquiring open space/ recreation land were tied as the number one response where respondents felt tax dollars should be spent. Continued public investment was also encouraged for preserving historic property, economic development, and solid waste disposal.
- Most respondents indicate that the City should encourage more open space and downtown redevelopment via its planning and zoning ordinance, while future residential development should be discouraged, and more-so multi-family development.
- The downtown and the Route 128 corridor were identified as the preferred areas where more commercial/ business development should occur. Less residential development was the major response for each of the neighborhoods.
- Only seven percent of the respondents felt that the preferred use of Beverly Harbor, including the Bass River was for office use. Open space was ranked the highest at 73 percent, followed by restaurants and tourism. A definition of "tourism use" was not provided.

Clearly, the opinions of the respondents were weighed toward preserving open space while ensuring "smart" growth and revitalizing the harbor/waterfront area and the downtown. Waterfront issues were rated seventh among all citywide needs.

City of Beverly, Open Space and Recreation Plan Update—This plan, published in 2000, includes a five-year action plan that recommends acquiring waterfront parcels adjacent to the public pier, developing water-related recreational amenities on publicly-owned waterfront land, and implementing a town-wide public access program.

Beverly Master Plan Update—This update was completed in 2001 with the assistance of the Cecil Group, Inc. after a development period of one year and a half. The update identifies some key principles and strategies for a twenty-year horizon for Beverly.

Overall recommendations are found in the ten Guiding Principles. The Guiding Principles start with the concepts necessary to protect and promote the City's natural resources, next to focus on the community of citizens, and then to suggest how the proper utilization of both natural and human resources can result in the enrichment of all. Additional and more specific goals and objectives, and implementation strategies, were included in the master plan. Summaries of the results, particularly regarding the Harbor, are included in the section on Goals and Objectives.



The Beverly Master Plan update includes the following goals, which support the Harbor Management Plan:

- Encourage public access. Create walkways and bikeways, especially at the waterfront.
 Maintain and improve public access to the waterfront/river walk. Provide high quality
 streetscapes and waterfront access. Alternative transportation (bike/pedestrian paths, rapid
 bus shuttle and water shuttle). Connect the harbor front to downtown to River Street through
 zoning changes.
- Entrances into Beverly should be attractive. Particularly needed is a harborfront gateway at City Landing.

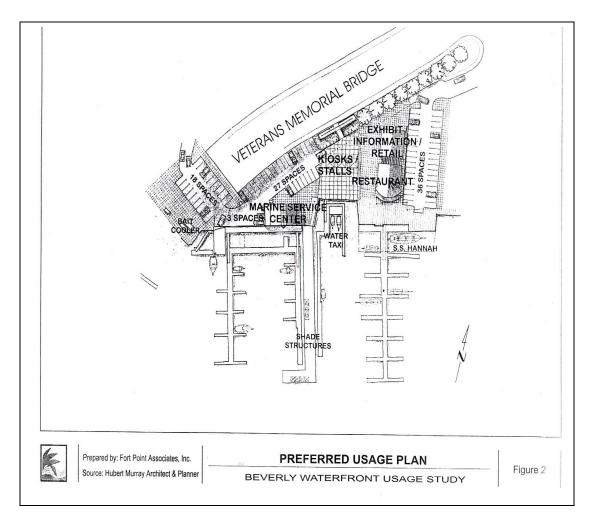
- Explore tourism and cultural potential of riverfront and waterfront venues. Promote historic
 and educational aspects of the harbor and city. Focus on Beverly's historic assets using
 collective resources and adding public transit.
- Create a new waterfront zoning district to replace current land and water use regulations and including the following aspects. Control and ensure responsible development of the waterfront. Require developers to conform to resource protection and historic preservation regulations. Advocate architecturally sympathetic infill construction to the existing historic character of the City and the creation of a water-edge walkway. Develop waterfront district zoning including design standards (sign regulations, buffer zones, no drive-throughs, etc.) to maintain the character of the area. Develop a parking management plan.
- Provide greater flexibility in planning and review process. Improve coordination between the boards in Beverly (Planning Board, Harbor Management Authority, Conservation Commission, etc.)
- Open up the waterfront area for mixed use and public access (Inner Harbor, Bass River)
 Promote mixed uses (both commercial and neighborhood uses) which may include groundfloor retail with commercial or residential uses above. Establish maximum building heights and
 lot coverage limitations. Encourage development of water-edge public walkway.
- Rezone the Bass River area for mixed-use.
- Use the waterfront to draw people into the downtown area through connections and use.
- Develop the area around the Beverly/Salem Bridge and Ventron property with mixed commercial uses (and possibly a marina and boat ramp) to attract the public.
- Improve waterfront access.
- Develop a plan to renovate and reuse city-owned buildings along the harbor edge in a manner that preserves their historical appearance.
- Create bike paths and make roads more pedestrian friendly to encourage alternate forms of transportation. The Open Space Plan recommends these paths run along the waterfront of the Bass River and the Inner Harbor.
- Create more parking serving the Inner Harbor and Bass River that will support waterfront activities to the greatest extent possible.
- Encourage commercial redevelopment of the "working" section of the City's waterfront that
 maximizes their economic potential and creates a magnet for tourism and commercial activity.
- Use the waterfront as a way to generate activity and revenues.
- Develop tourism as a new opportunity using the city's historical aspects and waterfront as destinations.
- Reuse the older industrial commercial areas before designating new areas. Several of the key older industrial areas are those found on the Inner Harbor waterfront and the Bass River
- New development must come under well-defined design guidelines to preserve character and protect adjacent residential neighborhoods. The downtown residential neighborhoods are directly impacted by the use and activities of the waterfront.
- Preserve and enhance the historic and natural character of the city. Design and physical character of the waterfront must be in concert with the community's historic and cultural aspects.

 Create partnerships with non-profits and for-profits to expand open space and recreation areas.

Ferry Landing Waterfront Usage Plan—This plan was adopted by the Harbor Management Authority for the city-owned land at and adjacent to the City Landing. It was prepared by Fort Point Associates in 2000 to show the potential of the City property and suggest an implementation plan. The study was one of two supported by outside funding from Salem Sound 2000 and the State of Massachusetts. The plan includes:

- Opportunities and Constraints
- Regulatory Context
- Alternative development options
- Waterfront Usage and Action plan

The usage and action plan created within the plan and adopted by the Harbor Management Authority is shown in the following figure:



Usage and Action Plan Prepared by Fort Point Associates

As noted on the plan, the program calls for replacing the former McDonalds restaurant with an exhibit/information/retail space and a new restaurant on the waterfront. The Harbormaster's existing office would be the location of the marine service center with adjacent parking and bait cooler. Waterside improvements would include docking for the S.S. Hannah replica, a water taxi, and certain improvements to the water front structures. Some of the waterside improvements have been made. However, the plan has not yet been fully implemented as the Harbor Management Authority seeks the funding and approvals necessary to accomplish the major components of this plan.

2. Public Participation

The long list of previous projects and studies points to the extensive efforts taken by the city to engage public opinion and encourage participation in municipal planning efforts, including harbor planning. The most recent master planning process was used to provide some additional input to all areas, including the coastal areas. Another was followed for the citywide master planning effort.

3. Researchers and Consultants

The following entities are listed in the city documents as participating in the harbor planning studies and processes:

City entities
Harbor Management Authority
Beverly Harbor Planning Group
Planning Department
The residents of Beverly

Consultants
City Design Collaborative
Appledore Engineering Inc.
Fort Point Associates
The Cecil Group, Inc.

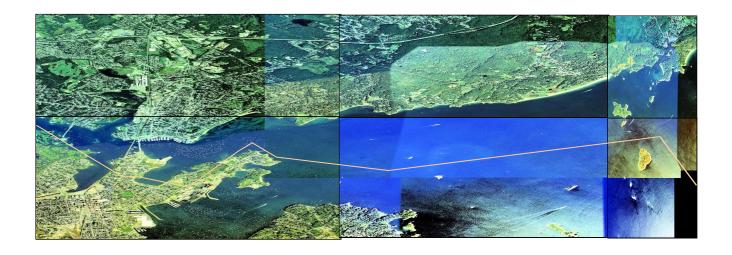
Others

The staff at the Massachusetts Coastal Zone Management office Salem Sound 2000

IV. HARBOR OVERVIEW

1. Geographic Setting

Located north of Boston, Beverly Harbor consists of the waterfront and water area bounded by the land and water corporate boundaries of Danvers, Salem and Manchester-By-The-Sea. It includes 10.58 miles of irregularly shaped shoreline comprised of rocky outcrops, salt marshes, sandy beaches, mud flats, waterfront recreational areas, and marine commercial activities. Currently, 0.94 miles, or 8.9 percent, of the shore is publicly owned. A deep-water inner harbor is located between the City's Commercial Fish Pier and Tuck Point. A 225-foot wide federal channel runs from Independence Park to Glover Wharf near the Veteran's Memorial Bridge with depths generally at 24 feet.



Composite of Aerial Photos of Beverly Harbor (source: MIT)

1. Harbor Planning Areas

The organization and composition of Beverly Harbor lends itself to the subdivision of planning areas. The Harbor Planning Group previously defined three sub areas: Inner Harbor, Bass River, and Residential Waterfront. These areas are carried forward into this plan.

The boundary of the harbor planning area encompasses the shoreline and adjacent landside area of the Beverly waterfront extending from the Danvers municipal boundary eastward to the Manchester municipal boundary including the tidal portion of the



Page 14

Bass River and the Shoe Pond at Cummings Center. The landward boundary follows either the closest public roadway to the waterfront or a line 250 feet from the waterfront, whichever is closer.

USGS map of Bass River

and Inner Harbor

Two boundary lines that join near Bakers Island define the water area. The first line extends from the City's western boundary with Danvers at Fosters Point to the Salem town line in the Danvers River east along the Beverly-Salem water boundary. This boundary turns southeasterly near House Ledge extending past the southwesterly shore of Bakers Island to the approximate latitude of 47° 30' 54".

The second line extends southerly from the City's eastern boundary with Manchester-by-the-Sea at the Chubb River to a point on the northeastern shore of Great Misery Island and then southeasterly to latitude 47° 30' 54". From there, the boundary runs along this line of latitude to the first boundary segment as previously described. This water area includes the federal navigation channel. Descriptions of the three sub areas follow.

A. The Inner Harbor

This Inner Harbor extends from northern right-of-way line of Water Street to the end of Congress Street, and includes the associated water area that extends to the Salem city water boundary. Two regulated areas are within the Inner Harbor and include the state Designated Port Area (DPA) and the Beverly Waterfront District. The DPA extends from approximately Water Street to the Veterans Memorial Bridge.

The Inner Harbor is densely developed with a variety of uses and represents the City's link to its past greatness as a maritime center. It includes the state Designated Port Area that extends from approximately Water Street to the Veteran's Memorial Bridge. In addition to several marine-related



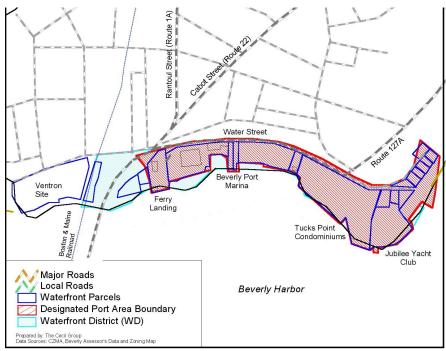
Veteran's Memorial Bridge. In addition to several marine-related USGS map of outer Harbor businesses, this area includes City-owned waterfront property, recreational and commercial fishermen's marinas, the former Ventron property, and the historic site of Washington's naval base.

Waterfront Parcels along the Inner Harbor of Beverly

Parcel	Public/Private	Use
Ventron	Private	Vacant
Rowand Fish Market	Private	Commercial and retail, seafood
Commercial Pier and Marina	City	Commercial, fishing
Ferry Way Landing	City	Recreational, public way and pier
Glover Wharf Marina	City	Recreational, municipal marina and former McDonalds
Beverly Port Marina	Private	Recreational, full service marina
Mike's Lobster	Private	Commercial lobster business
Tuck Point Marina	Private	Recreational, marina
Tucks Point Condominiums	Private	Residential, waterfront
Jubilee Yacht Club	Private	Recreational, yacht club
Sandy Beach	Public	Recreational
Boat Ramp	Public	Recreational

There is also a residential condominium development at Tuck Point. Although Tuck's Point is within the DPA, which does not allow marine recreational and residential uses, much of the recent development of the waterfront has supported recreational boating. Limited parking and restricted vehicular and pedestrian circulation inhibits public access to most of this area.

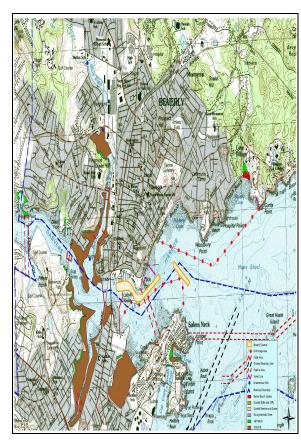
Boating activity is centered on the federal channel, which is adjacent to the shoreline. There is potential for regulatory conflict over future development between state (Chapter 91 and DPA) and local (zoning and site plan) regulations. This potential is discussed in Appendix I.



Land Use map of Beverly Harbor properties

Issues within the Inner Harbor

- Maintain a viable commercial fishing fleet
- Preserve and utilize the Federal Channel
- Future of the state Designated Port Area
- Lack of public parking
- Maximize recreational boating opportunities
- Water-edge public walkway
- Landside zoning and commercial/retail development
- Boats at public pier (including water taxis and charter boats)
- Safe navigation around and under the Veteran's Memorial Bridge
- Inconsistency of local zoning with state waterfront regulations
- Future waterfront development activities that recognize the City's maritime heritage and provide suitable waterside recreational opportunities



USGS map of Bass River to Shoe Pond shaded areas along the River are exposed mud flats.

 Use of waterfront parcels including the City property near Veteran's Memorial Bridge and the former Ventron property.

B. The Bass River Area

This Bass River area encompasses the River and the adjacent waterfront. It extends from the end of Congress Street and Salters Point, up the Bass River and including both shorelines past the Bridge Street/Hall-Whittaker Bridge. It further extends beyond Elliott Street to the ponds (Shoe Pond) at the Cummings Complex.

This area is characterized by a mix of uses. Uses on the eastern shore of Bass River include waterfront residential, two community parks (Gillis and Innocenti), two commercial fishing operations, a boatyard, a marina/yacht club, and commercial activities. Uses on the western shore include waterfront residential. Although technically navigable, there are significant limitations for safe passage of vessels in the River. Water levels are extremely low at low tide with mud flats exposed at low tide over much of the river as show in the shaded areas of the USGS map. The relatively low height of the Hall-Whittaker Bridge limits the vessel size and access north of the bridge.

Issues within the Upper and Lower Bass River

- Safe navigation for commercial and recreational vessels, which requires dredging
- Improving opportunities for public access, especially on the lower river and around the Shoe Pond.
 USGS Map of Bass River
- Increasing the capacity for additional moorings
- Ensuring continued opportunity for commercial fishing
- Redevelopment in concert with Inner Harbor

A. The Residential Waterfront

The residential area encompasses the rest of Beverly's waterfront and includes two segments:

- 1. The shoreline and water area from Salters Point to the Danvers boundary and
- 2. The shoreline and water area from Tuck Point to the Manchester-by-the-Sea town line. The second segment includes the water area to the Salem municipal water boundary inclusive of the water areas around Great and Little Misery Islands as well as Bakers Island.

Land use is mostly waterfront residential uses, but includes a number of access points including public beaches, Lynch, Obear, Hannah and Independence Parks, and the Dane Street and Woodbury Beaches. There are also a variety of marine environments including salt marshes, rocky shores, and mud flats. Although the water area for this segment is the largest of the three sub areas, it generally has less concentrated boating activity.

Issues along the Residential Waterfront

- Greater opportunity for public access
- Improving water quality for marine fisheries in the Outer Harbor
- Extensive mud flats that may limit future mooring areas

2. General City History

Beverly, Massachusetts traces its history back over 375 years to 1626 when it was originally settled as part of Naumkeag, later known as Salem, Massachusetts. Beverly, named by Roger Conant and his followers after a town in Yorkshire, England, became a separate municipality in 1668. From its early days as a township settled by planters and fishermen, Beverly evolved into the "Garden City of the North Shore," and was incorporated as a city in 1894. Its harbor has been active for over 300 years, serving as an official port of entry from 1683 to 1789.

Beverly, like its neighbors Salem and Danvers, was afflicted by the witchcraft hysteria of 1692. In fact, it was here that the mania was initially spread, and finally discouraged when the Reverend John Hale's pious wife Sarah was falsely accused of being a witch. The Balch House and the Hale Farms, both operated by the Beverly Historical Society, contain significant witchcraft memorabilia. A number of those accused of witchcraft are buried in the Ancient Burial Ground, and one can now take a leisurely stroll into the Witches Woods, where those accused sought refuge.

Beverly is home to a number of nationally recognized historic resources. The John Balch home, circa 1636, located at the corner of Cabot and Balch streets, is the oldest wood frame house in America. The oldest commercial building in America is also in Beverly, located at 1-3 Front Street, overlooking Beverly Harbor as part of the Fish Flake Hill Historic District. Among its other historic firsts, Beverly boasts America's first cotton mill, established in 1788; the first Sunday School in New England, built in 1810; the famed "Britannia Ware Pottery;" the original "Boston Bean Pots," and the first armed vessel to set sail in defense of our country.

The armed schooner Hannah was equipped, outfitted, armed, and commissioned by General George Washington on September 2, 1775. Three days later, it set sail from Beverly's "Glover Wharf" as the first ship in Washington's Continental Navy. The first vessels to join his navy with the Hannah were the Hancock, Franklin, Lee, Warren and Lynch. Each was commissioned, armed, and sailed from the Port of Beverly to engage British merchant vessels.

On January 14, 1776, General George Washington sent Colonel John Glover and his 14th Regimen to Beverly. They encamped at Independence Park off Lothrop Street. It was here that the declaration of independence was read to the troops and assembled townspeople on July 17, 1776. Two days later, they began their march to join the main army in New York. Five forts were built and manned by Glover's regimen overlooking West Beach, Barnett, Woodbury Point, Tuck Point, and Paul's' Head (today's Hospital Point) during their stay in Beverly. During the Revolutionary War, over 600 British ships were captured, and at war's end 60 British vessels were anchored in Beverly Harbor and the Bass and Danvers Rivers.

The arrival of the railroad in the 1840s brought with it American business tycoons to summer along Beverly's famous "Gold Coast." Beverly Cove, Prides Crossing, and Beverly Farms became the summer addresses for many of the nation's business and political leaders during the industrial revolution and the reconstruction following the Civil War. Even the Presidential Yacht "Mayflower" was a common site in Beverly Harbor, particularly during the administration of William Howard Taft.

From 1909 through 1912, Beverly was the site of the Tafts' Summer White House. The Tafts first settled into the Stetson Cottage on the Robert Evans estate, now Lynch Park. After Mrs. Evans had the Stetson Cottage moved to Marblehead in order to expand her rose garden, the Tafts moved to Parramatta, the late George Peabody's estate off Corning Street.

Beverly was more than just a resort community, however, it was also at the forefront of the industrial revolution. Shoe manufacturing began in Beverly as an off-season winter occupation for fisherman. It

moved into great prominence during the Civil War when Gordon McKay, who bought several patents involving the stitching of leather shoes, provided the Union Army with 150,000 pairs of shoes using McKay machines. Meanwhile, the Goodyear Co., in Akron Ohio, introduced a mechanical method for sewing uppers to the soles. This revolutionized the industry. In 25 years, the labor costs for a pair of shoes dropped from \$55.65 to \$0.74. By 1875, Beverly was a leader in the shoe industry with 29 factories.

In 1889, Sidney Winslow, a second generation Lynn shoe maker, rose to the directorship of Consolidated Hand Lasting Machine Company, which used a lasting machine invented by a Dutch Guianan named Jan Matzeliger. The three men, Winslow, McKay, and Matzeliger formed a partnership and founded United Shoe Machinery on February 7, 1889.

In September 1903, USM proudly announced it would construct the largest factory in the world, employing 2,500 workers on a 90-acre plot of land at the mouth of the Bass River. Designed by engineer Eric Ransome, the new plant would consist of three buildings. Buildings A and B would be 60 feet wide and 520 feet long; Building C would be somewhat shorter. The plant would cover 10 acres of floor space with 90% glass walls and utilizing reinforced concrete, a new technique, for structural support. By 1907, "The Shoe" had earned acclaim as the most enlightened employer in New England. During World War I, it employed over 5,000 workers.

USM operated in Beverly until it shut down operations in 1987 due to a forced divestiture after the company was found to be a monopoly. The USM campus is currently undergoing a spectacular renovation and expansion as the Cummings Center.

During the mid-twentieth century, Beverly's shoe industry declined significantly. By the 1970's, there were many abandoned industrial sites. However, the changes brought new opportunities. During this time, new development was spurred in many parts of the City. Growth in small businesses and residential development occurred in outlying neighborhoods away from the urban core. In the 1980's, several large waterfront parcels were developed for condominiums and residential development flourished in Centerville. In the 1990's, the former United Shoe factory began transformation into a modern office and research campus known as Cummings Center. A 100-acre industrial park was established next to the Beverly Airport, and several outlying, medium to small commercial centers rose up along the major arterials north of the City core as well.

In Beverly, as in many other coastal communities, water borne commerce declined in importance when other forms of transporting goods became more viable. At the same time, more disposable income and leisure time created a new demand on the waterfront. One result has been that Beverly Harbor commerce has focused on pleasure boats as a principal commodity.

In recent times, Beverly has become a very attractive residential community as evidenced by the residential building boom of the last several decades. Combined with the success of Cummings Center and development of the industrial parks, these conditions have suggested to many that a new socio-economic period has been created.

Currently, Beverly has a strong civic and commercial downtown core that, as noted, was once closely connected to the harbor. The downtown begins at the intersection of Cabot and Rantoul Streets and is the most densely populated region of the City. In addition, Fish Flake Hill, the City's main historic district, is located within the downtown area, providing a colonial backdrop to the City's core central business district.

3. Historic Development of the Harbor

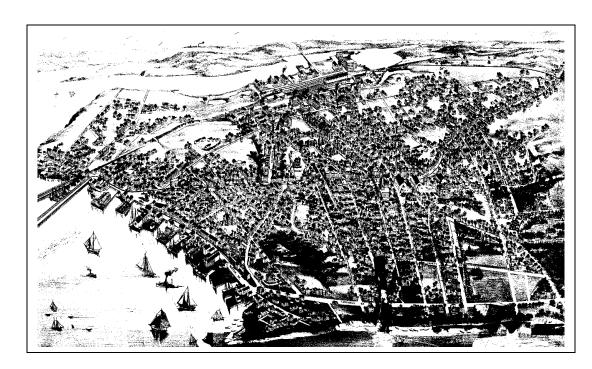
Beverly has a long history of maritime activity. Settled in the mid 1600s, the community soon flourished as an agricultural and fishing center. A ferry was instituted to run between Salem and Beverly in 1636. Across

the mouth of Bass River at Salter's Point, a salt works was constructed in 1639, which was crucial to the development of the fishing industry in the community. And, Beverly Harbor was an official port of entry from 1683 to 1789.

Through the 1700s and early 1800s the town's maritime tradition continued, and by 1840 over 500 Mainers were sailing from the Port of Beverly on 80 vessels. Cabot Street became the commercial center of the community. Beverly's whaling period began in 1850 and lasted until 1866 when crude oil displaced the need for whale oil.

Wharves and warehouse construction began in 1701 on the harbor front and the community's economy began to diversify. Retailing and wholesale trades associated with the wharves appeared after the Revolutionary War, along with increased fishing and an infant mill industry. Farming continued as the dominant inland occupation with shoe making gaining popularity along the Bass River during the off-season for area fisherman.

In 1775, during the Revolutionary War, General George Washington ordered Colonel John Glover to arm a small task force of speedy coastal schooners to intercept incoming unarmed British supply ships. Glover selected Beverly as the homeport for Washington's secret Navy Base because it was sheltered from most storms and it had very deep water through its harbor channel. Thus, the harbor is considered to be the birthplace of the Continental Navy, also known as George Washington's Naval Base. The Hannah was the first ship commissioned and was followed by the Hancock, Franklin, Lee, Warren, and Lynch. Five were built along Beverly's shoreline and dozens of Privateer ships commissioned by the Province of Massachusetts made Beverly their homeport, bringing enormous wealth to the town. As the supply center for Washington's troops, Beverly was the most important coastal community during the Revolutionary War, and the only Continental Army Post north of Boston.



Historic view of Beverly Harbor

Almost one hundred years later, in 1839, the railroad bridge linking Beverly and Salem was completed. . In 1844, plans were completed to extend the railroad along the coast to Cape Ann. The Gloucester Branch

was opened on August 3, 1847. David Neal, president of Eastern Railways, resided in Beverly Farms and sited the railroad in order that the original Beverly Farms Station was located within 100 yards of his front door.

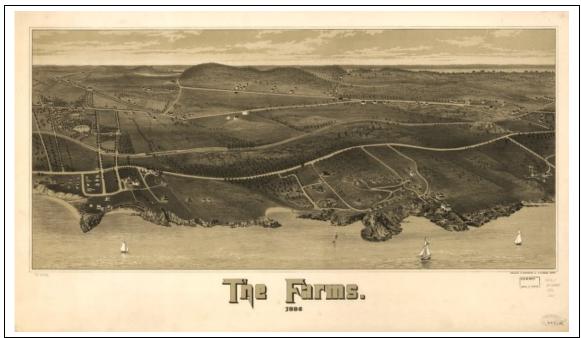
Aided by the introduction of the railroad, the maritime economy began to change. Beverly moved from agricultural and maritime economy towards an industrial economy. By the end of the nineteenth century, the fishing industry was in decline, and lumberyards and wharves replaced the structures along the shore associated with the fish industry. An industrial district developed along the Bass River with manufacturing for furniture, shoes, bricks and iron hollowware. Although fishing was no longer prominent, maritime commerce flourished. Beverly's industrial products and lumber were traded worldwide.

Beginning in the 1840s, Beverly Harbor also became recognized as the prominent feature of an emerging resort community. Wealthy Boston residents, industrialists, and others constructed large summer cottages and mansions in Beverly Cove, Prides Crossing, and Beverly Farms. By 1885, this area between Beverly Cove and Eastern Point became known as "America's Original Gold Coast." Many notable historic figures built homes in Beverly during this period. The first to purchase along the shore were John G. King of Salem and Charles C. Paine of Boston. Others included Franklin Dexter, who built "Oberland" in 1845 on 20 acres purchased from Sam Ober, Charles Greely Loring, Franklin Haven, and Colonel Henry Lee, aide to Governor Andrew during the Civil War, who purchased property for his seaside estate adjacent to West Beach.

Doctor Oliver Wendell Holmes and his son, Oliver Wendell Holmes, Jr., US Supreme Court Justice, both lived in Beverly Farms. The Lowell, Pickman, and Burgess families built estates, as well as Congressman Nicholas Longworth of Ohio and Senator Albert Beveridge of Indiana. Henry Clay Frick, the Chairman of Carnegie Steel, built the Versailes of the Gold Coast, "Eagle Rock," in 1905.

During this period yachting became a popular past time. In 1872 the Beverly Yacht Club was established on Woodbury Point and in 1893 the Jubilee Yacht Club was founded at its current location. Ship chandlers and sail makers established businesses along Water Street in the Inner Harbor to support the yachting clientele.

By 1925, most of the maritime trades had disappeared from the Inner Harbor, and all of them except the Commercial Fishing Company near Tuck Point were replaced by coal yards that extended up the Bass River. After the demise of the coal yards in the 1950's, the waterfront began to develop as a mix of marine industry, commercial fishing, and recreational boating. A fuel storage and distribution enterprise was established on Tuck Point. Several floats were extended into the Inner Harbor for use by commercial lobstermen. By the 1960's several small marinas began to emerge. By the late 70's and early 80's, demand for recreational boat slips exploded and marine services and facilities were established to support this demand. The Bass River area adjacent to the railroad tracks began to support commercial fishing and marine support services to complement industrial activities such as the Beverly Electric and Gas Works. The remainder of the harbor waterfront remained residential.



Beverly Farms waterfront, 1886

4. Extent of Jurisdiction

There are a number of local, state and federal agencies that have authority for planning and regulating activities in Beverly's harbor area. In a number of instances there is overlapping jurisdiction for particular activities. For example, new structures in the Inner Harbor area may be subject to state Division of Waterways including Designated Port Regulations as well as U.S. Army Corps of Engineers and U.S. Coast Guard regulations.

The sections below summarize existing local, state, and federal agencies and policies that relate to harbor management. It also identifies key entities whose interests are recognized in harbor planning.

A. Local Entities

Harbormaster

The Harbormaster is responsible for:

- The general care and supervision of the harbor and waterways over which he/she
 has jurisdiction, subject to the direction and control of the Army Corps of Engineers' federal
 channel and anchorage areas,
- The safe and efficient operation of the harbor and navigable waterways pursuant to the City harbor ordinance and state laws and regulations relating to boating safety and operations, and
- Issuing mooring and float permits as well as oversight for public landings and mooring areas.

Beverly Harbor Management Authority

The Mayor and City Council appoint the eleven-member committee of the Beverly Harbor Management Authority, which is specifically responsible for managing landside and waterside activities at all city waterfront properties including City Landing. The Authority was established under State legislative act. The Authority is charged with administering all public facilities on the harbor, securing public access to areas under the jurisdiction of MGL Chapter 91, protecting the rights of Beverly fishermen, and promoting recreational boating. The Authority works with the Harbor Master to:

- Enforce the rules and regulations for Beverly Harbor;
- Draft and implement a harbor management plan;
- Review and comment on waterfront projects in the Waterfront District zone, including Chapter
 91 license applications;
- Review and make recommendations on proposed zoning changes for land bordering Beverly Harbor; and
- Act as the liaison advisor that represents the city with all state and federal agency actions relating to waterfront issues.

These activities provide a direct opportunity for the Authority to have an impact on waterfront development and regulation.

Planning Board

The Planning Board is involved in land use planning activities in the City. The board administers the Zoning Ordinance, reviews all subdivisions and site plans, and proposes zoning changes and amendments. The board has the power to approve, disapprove, or approve with conditions subdivisions and site plans. Relative to the harbor area, the board exercises its jurisdiction within the Waterfront District in the Inner Harbor as well as the other zoning districts that encompass the immediate shoreline of Beverly. The Planning Board also reviews Chapter 91 license applications.

Conservation Commission

The Commission is responsible for administering the state's Wetland Protection Act within a zone extending 100 feet from the high tide line. The Commission is responsible for administering the state's Rivers Protection Act within the procedures of the state wetlands program for activities within 200 feet of the mean annual high-water line of the Bass and Danvers Rivers. The Commission also reviews development for conformance with the law, including any project involving dredging, filling, and new structures on the Harbor.

B. State Entities

Massachusetts Coastal Zone Management Office (MCZM)

MCZM administers the state's Municipal Harbor Planning Program and Designated Port Are (DPA) regulations and conducts a variety of reviews relating to harbor management including planning and development, particularly dredging and spoils disposal. The relevant state CZM policies and regulations are listed later in this report.

Beverly has a Designated Port Area (DPA) within the Inner Harbor Area that extends from the City's Ferry Way Landing to Quincy Park landward to Water Street. In general, the DPA regulations require that development within this area be a water-dependent industrial use, although there are exceptions for projects involving significant public access or compatible commercial activities. The City has the opportunity to work

with MCZM during the harbor planning process to explore options for future waterfront use. Such options are further discussed in the subsequent section on the DPA.

Massachusetts Department of Environmental Protection (MDEP)

MDEP administers a number of programs including waterways licensing, wetlands, solid waste disposal, and hazardous waste management. Particularly important to harbor management is the Chapter 91 Waterways Licensing Program that regulates the use of flowed and filled tidelands up to the historic high water mark. The historic high water mark in the Inner Harbor tends to coincide with Water Street and along a line approximately half way between Congress Street and the current shoreline.

Much of Beverly's harbor shoreline, including the Inner Harbor includes flowed tidelands that fall within the jurisdiction of Chapter 91 that is administered by the Waterways Division of MDEP. These regulations require that uses in the subject area be water-dependent. Any change in use, alteration or construction of structures, placement of fill, or dredging in these areas is subject to licensing. Chapter 91 may also be used to require public access to the waterfront if significant construction is undertaken in a tidelands area.

Division of Marine Fisheries

The Division of Marine Fisheries is responsible for regulation and management of the state's finfish and shellfish resources. Catch statistics included in this plan are available from the Division.

Massachusetts Highway Department, Executive Office of Transportation and Construction

This Massachusetts Highway Department is responsible for capital funding programs that may be relevant to harbor planning and development. For example, this agency recently completed a ferry study and is currently accepting applications for water-related transportation projects.

C. Federal Entities

Army Corps of Engineers

The Army Corps of Engineers regulates work in, or affecting, navigable waters of the United States under Section 10 of the Rivers and Harbors Act of 1899. The Corps plans, designs and contracts for harbor improvements including navigation channels, anchorages, erosion control, flood protection, and beach restoration. This agency is also responsible for maintenance and dredging of Beverly's federal navigation project, which includes the federal channel and the two adjacent anchorage areas. The Corps also permits placement of filled or dredged materials within the Harbor or adjacent wetlands under Section 404 of the Clean Waters Act.

Environmental Protection Agency (EPA)

The EPA regulates discharges of sewer, water, and industrial waste systems into the Harbor and issues permits for the discharge of pollutants. EPA also has veto power over the Army Corps permits for ocean dumping of dredged materials under Section 103 of the Marine Protection, Research and Sanctuaries Act.

U.S. Coast Guard

The U.S. Coast Guard is responsible for navigational safety in the waters of the United States through the placement and maintenance of the Aids to Navigation buoys and markers. In Beverly Harbor, the Coast Guard installs and maintains numerous buoys that mark the federal channel and a local channel in the Bass

River below the bridge. This agency also provides rescue assistance to boaters and reviews applications for bridges and structures with respect to navigation.

Federal Emergency Management Agency (FEMA)

FEMA has a broad range of activities that help protect the nation from disasters. They advise on building codes and flood plain management, teach people how to get through a disaster, help equip local and state emergency preparedness, coordinate the federal response to a disaster, make disaster assistance available to states, communities, businesses and individuals, train emergency managers, support the nation's fire service, administer the national flood and crime insurance programs.

FEMA also prepares flood hazard area mapping for purposes of flood insurance, protection of property, safety of people, and resource management. The shoreline of Beverly is within the 100-year flood hazard area as defined by this agency.

National Marine Fisheries Service/U.S. Fish and Wildlife Service

These agencies participate in the review of any ocean disposal of dredge materials. The National Marine Fisheries Service also manages marine species including fish, marine mammals, and endangered species.

D. Major Interest Groups

Beverly has a number of governmental and citizen groups that have an interest in the future development and management of the Harbor. Key interest groups to be incorporated into the planning process are identified below.

Master Plan Steering Committee

This Master Plan Steering Committee was formed to guide the creation of the Beverly Master Plan update. Coordination with the Harbor Management Authority has occurred through meetings and integrated membership. The Steering Committee will complete its work in July 2002.

Harbor Plan Committee

The Harbor Plan Committee prepared a Scope of Services for the Harbor Plan. It included representatives from the City Council, commercial fishermen, yacht clubs, neighborhoods, the Harbormaster, and City Planning Department.

Salem Sound 2000

Salem Sound 2000 is the primary environmental organization that works toward improving the water quality of Salem Sound from Manchester to Marblehead. In addition to water quality monitoring, this group is active in public outreach, storm water management, and issues affecting water quality.

Beverly Chamber Of Commerce

This Beverly Chamber of Commerce represents Beverly businesses including those along the waterfront. It is interested in maintaining and enhancing the opportunity for business growth and development. It has created a subcommittee focused on waterfront issues.

Ward Two Civic Association

Much of the Inner Harbor area is within the Ward Two district. The Ward Two Civic Association has remained very interested in maintaining the quality of the neighborhood and plans for the harbor and waterfront.

Open Space and Recreation Committee

The Open Space and Recreation Committee is interested in enhancing access to the harbor and waterfront through acquisition or other regulatory and non-regulatory means for residents of the City. This Committee has presented their concepts within the Open Space and Recreation Plan.

V. INVENTORY AND ANALYSIS OF EXISTING CONDITIONS

Beverly Harbor has a variety of natural and built coastal features including tidal waters, coves, channels, beaches, piers federal channel, seawalls, developed waterfront areas. All these uses support a wide range of waterfront uses and activities. This section describes the history of the Harbor, and provides an inventory and analysis of the existing conditions.

1. Inventory of Historic Resources

A summary of the historic resources on and near the Harbor is provided below. The history of Beverly Harbor is included in the earlier chapter.

A. Historic District – Fish Flake Hill

Beverly has only one local historic district, Fish Flake Hill, although there are several other areas in and near the downtown that are historically significant. Fish Flake Hill Historic District, located behind the active Inner Harbor, is primarily a residential district bounded by Cabot, Bartlett, and Water Streets. This area boasts the highest concentration of historic houses in Beverly - it encompasses roughly 35 acres and 162 properties. The district was once part of an area and industry that dried and flaked codfish, mostly for export.

B. The National Register of Historic Places

The National Register of Historic Places is the federal government's list of structures, sites, areas and objects that are significant in American history, architecture, archeology, and culture. Beverly has 16 structures and two districts on the National Register, including the original restored section of the Balch House (c. 1636), documented as the oldest framed house in the United States.

Table 1: Number of Historic Features on the National Register

Type of Historic Place	Number of Sites
House	11
Industrial site	1
Lighthouse	1
Public Offices	3
Districts	2
Total	18

Source: Open Space and Recreation Plan

The Beverly Historical District Commission, with cooperation from the Beverly Historical Society, published a survey report by Margaret Hepler called "Historical Cultural Resources Survey, 1992 - 1993". This document lists the historic structures and cultural areas that exist within the City, many of which qualify for listing in the National Register. Some of the attractions listed in this document include:

- Captain Hugh Hill Warehouse
- Conant House
- Hale House
- John Balch House

- John Cabot House
- Lynch Park Carriage House
- Oliver Wendell Homes House
- Samuel Herrick House

1. Marine Waterfront and Harbor Facilities

The use of Beverly's waterfront and harbor area has evolved in response to geographic and economic opportunities. Presently, the harbor supports a variety of uses including waterfront industry, recreational boating (jet skis, kayaks), commercial fishing, and public assess for swimming. The greatest concentration of activity in the harbor is on the Bass River and Inner Harbor.

Along the Bass River there are only three water-dependent uses:

- 1. The Bass Haven Yacht Club;
- 2. Desmond's boat yard
- 3. Two private docks used by commercial fishermen.

In the Inner Harbor the majority of the waterfront is devoted to recreational boat activity and commercial fishing. The following structures and organizations support these activities:

- The City Landing pier and Harbor Master's office;
- The commercial fishing marina;
- Glover's Wharf recreational boat marina;
- Ferry Way Park, associated with Glover Wharf;
- Port Marine slips and marine service facility;
- Two private docks;
- Tuck Point wharf and slips; and
- The Jubilee Yacht Club.

Ventron Property

The Ventron property, located on the Inner Harbor west of Veteran's Memorial Bridge, was the site of the Metal Hydrides plant. It produced pure uranium, now considered hazardous waste, for the nation's secret Manhattan Project from 1941 to 1945. Later owned by Morton-Thiokol facility, the site has essentially been physically cleaned with the concurrence of the Army Corps of Engineers and the U.S. Atomic Energy Commission. Consequently, it is expected that the property will be available for an alternative use within the next year.

This property will be subject to the 200-foot setback jurisdiction of the state's Rivers Protection Act. There should be a plan to incorporate the City-owned property discussed above and provide a coordinated vision that links both parcels. Several options and uses are available on the waterside and landside of the Ventron property that would complement and enhance adjacent waterfront uses. These opportunities include:

Landside:

- Residential units/commercial facilities
- Municipal boating facilities
- Parking
- Storage
- Launch ramp

Waterside:

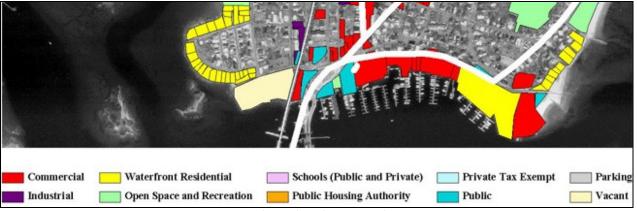
- Recreational Boats
- Commercial Facilities

Ferry Landing and other City-Owned Property

The Ferry Landing contains Ferry Way Park, the Harbormaster's office and associated parking, the former McDonalds restaurant, Glover's Wharf recreational boat marina, and a commercial fishing boat marina. One portion of the Ferry Landing, located at the foot of Cabot Street and the Veteran's Memorial Bridge ramp, was recently transferred to the City by the state highway department as part of the termination of the old bridge and construction of the new bridge over the Inner Harbor.

The Harbor Management Authority would like to improve opportunities for the commercial fishermen by upgrading slips and shore-side support facilities. The Authority is also considering the future use of the former McDonalds property and Glover Wharf to determine the most suitable way to encourage additional public access for recreation, tourism, and educational purposes while taking advantage of the site's maritime history. Ongoing studies include plans to:

- 1. Support the Harbor and marine interests,
- 2. Provide substantially more public access, and
- 3. Provide other facilities that attract the public.



Land Use along the Inner Harbor

2. Harbor Transportation and Circulation

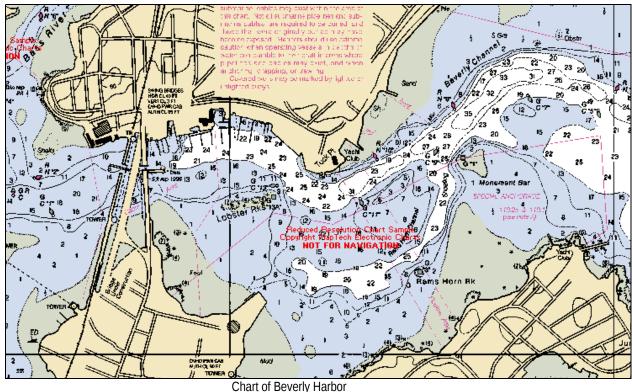
A. Federal Channel

The federal channel in Beverly Harbor begins approximately due south of Dane Street Beach near the Salem-Beverly water boundary and extends one mile west to Glover Wharf. In the Inner Harbor, the channel parallels the shoreline. Approved in 1919 and completed in 1927, this federal project is about 225 feet wide and averages about 24 feet deep with actual depths extend to almost 40 feet. The channel is reportedly a hard bottom, and no maintenance dredging has been performed on the channel proper.

Well over half of the boat slips in the Inner Harbor are in the Federal Channel. Encroachment into the federal channel is due in part to the limited availability of surface water for slips and the high demand for docking boats at slips. This situation resulted in a moratorium in1993 to prevent further expansion into the public channel. Floats in the Federal Channel are required to be bottom anchored so they can be removed in a timely fashion in the event that a deep draft vessel needs use the channel.

B. Aids to Navigation

The channels within Beverly Harbor are identified with aids to navigation that run along the federal channel and up the Bass River. The Beverly Harbormaster and the U.S. Coast Guard jointly maintain these aids. See the following figure for indications of cans, buoys and other aids to navigation.



C. Roadways and Parking

Beverly Harbor is best accessed from the north via Route 128 to Routes 62, 22 and 1A. These routes can be busy or even congested at certain periods of the day, especially Route 62 during the morning and evening rush hours. Less convenient is Route 1A from Salem, although the new state-funded bridge between Beverly and Salem provides better access from the south into the harbor area than previously available.

The major roadways for traffic circulation along the Inner Harbor are Water and Congress Streets. These relatively narrow streets, especially Water, can make circulation difficult. Water Street has no convenient easterly access. In addition, this area is divided by the ramp to the Veteran's Memorial Bridge and the adjacent intersection of Rantoul and Cabot Streets. Along the Bass River, the main routes for circulation are River, Elliot, and Bridge Streets. The narrow, winding streets of the Goat Hill area make easy traffic movements difficult. In the remaining areas of the Harbor, the main routes of circulation are Route 62 from the west and Lothrop/Hale Street (Route 127) that extends to the Manchester-by-the-Sea boundary.

Parking along the waterfront in the Inner Harbor and on the eastern side of the Bass River is very limited. At present, there are only two public parking areas--one associated with the Harbor Authority Building near the Veteran's Memorial Bridge (13 spaces including 2 handicapped; 18 spaces directly under the bridge) and the other with the City property at the former McDonald's site (41 spaces). The City has developed additional parking on property off Summit Avenue (across Rantoul Street) that was owned by the

Massachusetts Highway Department. Along Water Street, there is only enough parking for 13 vehicles at the eastern end on each side of the street near Tuck Point. On Congress Street, parking is limited to one side of the street beyond the railroad tracks for approximately 15 to 18 cars.

D. Pedestrian Access

Along the historic Inner Harbor, a public walkway associated with the Tuck Point condominiums and city property has been created. There are also sidewalks on the Veteran's Memorial Bridge, Cabot/Rantoul Streets, and on one side of Water Street. Other pedestrian access has been created under permit reviews for properties on the Upper Bass River and at around the Shoe Ponds at Cummings. There is a public walkway associated with an easement that runs along the Bass River behind the Super Stop n Shop supermarket and in front of the car wash at Bridge Street. In the outlying residential areas, there is little opportunity for continuous public access.

However, a significant portion of the Inner Harbor waterfront does not provide continuous public access. Several public easements to and along the Inner Harbor have been blocked with fences at the Port Marina and Thibideau properties.

E. Trains

The Massachusetts Bay Transit Authority (MBTA) currently provides rail service to Beverly. There are five commuter rail stations in the City: Beverly Depot, Montserrat, Prides Crossing, Beverly Farms, and North Beverly. The Beverly Station is on River Street and the Beverly Farms Station is near West Street/West Beach.

F. Water Transportation

In 1980, a private operator attempted to employ a ferry service based out of Beverly to serve the North Shore area. This venture lasted for one year and then was discontinued. Another charter boat service used the City Landing for a one-year period in 2001.

3. Harbor Infrastructure

The waterfront is supported by municipal and private infrastructure that includes the utility systems and shoreline structures.

A. Utility Systems

The City of Beverly supports water and sewer systems within all of the harbor areas. The systems have known problems due to the age of the utilities and are under continual improvement and maintenance.



Bass River at the Power Company

B. Shoreline Structures

Shoreline structures along the waterfront must be built to accommodate the average 8.5-foot tidal height in the Inner Harbor. Consequently, they are expensive to build and maintain. The conditions of these structures vary, but there has been little change in recent years.

4. Natural Resources

A. Marine Environment

Beverly's shorefront has natural, historical, cultural, and economic value. The shoreline consists of roughly 10 miles of rocky out crops, sandy beaches, mud flats, and man-made resources including parks, residences and waterfront businesses. Due to the configuration and topography of the shoreline and near coastal environment, the coast supports several acres of productive salt marsh.



City Landing
[Photo courtesy of the Oosthoek Group]

B. Shoreline Environment

The coastline of Beverly Harbor consists of a blend of urban waterfront development, sandy beach, and rocky outcrops. Rocky outcrops are most prominent at Woodbury Point, Curtis Point, Smith Point, and Allen Head. These areas provide habitat for crustaceans, mollusks, and algae. The sandy beaches are used heavily, possibly because there are relatively few of them. This utilization limits the value of the beaches as wildlife habitat.

Sandy beaches in the city include: Dane Street Beach, Pleasant View Beach, Independence Park, Lynch/Woodbury Beach, Mingo Beach, and West Beach

C. Salt Marshes

Beverly contains roughly 120 acres of marsh. One significant marsh located in the City is Chubb Creek Marsh near the Manchester-by-the Sea town line. Twenty-nine acres of this 44-acre marsh are located in Beverly. Organic matter found in salt marshes is a key food source for shellfish. Salt resistant plants located in the marsh consist of cord grass and salt marsh hay. Marsh wildlife includes wading birds and small fish.

D. Water Quality

The Massachusetts Division of Water Pollution classifies marine waters based upon a proposed standard of use. Class SA is the highest classification and is applied to waters that are suitable for all seawater uses including swimming, water sports and shellfish harvesting. No direct discharges are permitted. Class SBA waters have a relatively lower standard, which allows for swimming, fishing, boating, and shell fishing under certain circumstances. These classifications are based upon such water quality parameters as dissolved oxygen and fecal coliform. The Bass River, Danvers River, and Beverly Harbor all have a Class SB rating goal that allows for fishing and swimming. At present, none of these waters achieves this water quality

standard. The Massachusetts DEP has a water-quality sampling program in the harbor area, and many sampling sites are located at stromwater discharge points along the harbor shoreline. The sampling results at many of these sites exceed the coliform standard for Class SB waters.

All of these water bodies have been contaminated to various degrees by non-point pollution sources including: pathogens from sewage, urban runoff and storm sewers, and boat waste. The City of Beverly is part of the South Essex Sewer District, which has upgraded the sewage treatment plant to secondary treatment status that will improve the water quality of Salem Sound.

E. Fish

The Massachusetts Division of Marine Fisheries (DMF) has recently mapped known anadromous fish runs. Chubb Creek, which forms the border between Beverly and Manchester, contains a rainbow smelt run. The Danvers River, between Beverly and Danvers, is another site for smelt, which swim upriver to spawn in the Porter and Crane Rivers in Danvers.

As previously mentioned, a comprehensive survey of fisheries resources was carried out in Salem Sound by DMF in 1965. A number of shoreline sample stations were in Beverly. Atlantic herring, Atlantic silversides, winter flounder, smelt, and mummichogs were among the most commonly caught species. Winter flounder, yellowtail, and Atlantic cod were the most commonly caught species in Beverly Harbor. It should be noted that the relative abundance of flounder and cod are likely to have declined in the past 30 years due to over-fishing.

F. Wildlife

Wildlife in the City of Beverly is typical of the North Shore region. Salt marshes, unique to coastal areas, contain specific types of wildlife not found in inland areas. Shellfish and smaller fish species utilize the organic matter found in marshes as a direct source of food. It has also been determined, through an analysis by the United States Fish and Wildlife Service, that Beverly is part of the Atlantic Flyway and that migratory waterfowl are common in the area. Also, the tidal flats contain about 120 acres of productive and non-productive shellfish flats.

Like the vegetation, the wildlife of Beverly has not been particularly well studied. There are currently no rare or endangered species habitats in Beverly, according to the Massachusetts Natural Heritage and Endangered Species Program.

Since the Massachusetts Audubon Society's Endicott Regional Center in Wenham abuts open space in Beverly, it is likely that that the birds and mammals present there are also present in Beverly. Some particularly noteworthy birds of the Endicott Center include great horned owls, bald eagles, turkey vultures, red-tailed hawks, pileated woodpeckers, Louisiana water thrushes, and various other wood warblers. Some mammals observed at the Endicott Center include white tailed deer, red and gray squirrels, flying squirrels, white footed mice, woodchucks and fisher. Beavers have become an "issue" around Beaver Pond in Centerville. Raccoons, red foxes, eastern cottontail rabbits, coyotes, and opossums also are typical of the region. Spotted salamanders, green, bull and pickerel frogs, milk snakes, and ring neck snakes have been seen at the Endicott Center.

G. Birds

Between 1988 and 1989, the Massachusetts Audubon Society's North Shore Office conducted a winter waterfowl survey in Salem Sound. A number of observation points were in Beverly, including Independence Park, Mingo Beach and West Beach. Common species observed included red-breasted mergansers,

common goldeneye, buffleheads, common eider, black ducks, horned grebes, and common loons. The Audubon also surveys areas of Beverly as part of their annual Cape Ann Christmas Count.

Other Audubon surveys include their recently completed butterfly atlas and their Herp Atlas. In addition to these organized surveys, various documents associated with proposed developments (e.g. Environmental Impact Reports, etc.) contain useful information on wildlife habitat.

H. Shellfish

There are 120 acres of shellfish beds located in Beverly's tidal flats. These shellfish beds are managed by the state Department of Marine Fisheries. Shellfish harvesting is prohibited in Beverly Harbor due to high fecal coliform counts that indicate the presence of human waste. This waste is most likely from the discharge of sewage and industrial waste into the Harbor. Shellfish harvesting in Beverly Harbor has been restricted since the 1960's.

I. Eelgrass

Eelgrass is an important natural resource that has been depleted over time in the New England tidal waters. Shallow areas of the Harbor, such as West Beach and Beverly Cove, contain several beds of the vegetation. Eelgrass is an important ecological resource as it provides nursery habitat for young fish, as well as feeding grounds for a variety of birds and larger fish species. Eelgrass beds have been declared a "special aquatic site" under federal wetland protection programs. The eelgrass bed off West Beach is one of the most extensive on the North Shore. Eelgrass also can be found in the Beverly Cove area.

5. Scenic Resources and Unique Environments

Physical attributes that contribute to Beverly's character include the unique set of coastal resources found around the harbor that create a 'New England' style environment.

A. Coastal Environment

An irregular coastline, several miles long, with numerous harbors and attractive homes, against a backdrop of rounded outcrops, headlands, and salt marshes adds outstanding visual character to Beverly's inventory of scenic resources. A deep-water harbor is located between Goat Hill and Tuck's Point. The coastline is an interesting mixture of urban harbor, rocky shoreline, and sandy beaches. Sandy beaches include Dane Street Beach, Patch Beach, Mingo Beach, and West Beach. These are valuable recreational beaches, but their small size and heavy use by people limit their value as a wildlife habitat. Rocky shorelines occur at various points along the coast, most notably at Woodbury Point, Curtis Point, Smith Point, Allen Head, and at the eastern end of West Beach. Brown algae (rockweeds, bladder wrack), periwinkle snails and green crabs are common in intertidal pools among the rocks. Part of the Chubb Creek salt marsh is in Beverly. Salt tolerant plants such as cordgrass and salt marsh hay dominate this typical New England salt marsh. Wading birds (herons, egrets, etc.), black ducks, and small fish are common inhabitants of salt marshes on the North Shore.

B. Islands

The offshore islands located in Salem Sound are part of the City of Salem and are not part of Beverly, but are ecologically and administratively related to the City. The US Fish and Wildlife Service surveyed the islands, including Great Misery, in 1977, and again in 1984-85. Species found on the islands, such as herring, Black Backed Gulls, and double crested cormorants, undoubtedly find their way to main land Beverly to feed in the salt marshes. Herons and egrets that nest on a few of these offshore islands

occasionally feed in the salt marsh at Chubb Creek. Although the islands are under the jurisdiction of the City of Salem, they are located in Beverly Harbor and are in Beverly waters. Therefore, the Harbormaster controls moorings and vessel activity in the waters around Great Misery (owned by the Trustees of the Reservation), Little Misery, and Bakers Islands. Chubb Island is owned by Salem.

6. Pubic Access

A. Waterfront Access

There are a number of opportunities for access to the harbor given the City of Beverly's approximately 10 miles of shoreline. These include: 1) seven waterfront parks, four of which have beaches and associated public facilities; 2) three major harbor areas (Bass River, Inner Harbor, Outer Harbor) with associated facilities for access; and eight public landings, three of which have associated public beaches. Table 2 contains a listing of these waterfront facilities. In addition to the public landings, there are rights-of-way to the harbor off Lothrop Street at Ocean Street (steps to beach), Atlantic Avenue (scenic view only), Abbott Street (steps to beach), and Washington Street (scenic view only).

Table 2:- Waterfront Parks, Beaches, and Landings

Name		Locatio n	Size	Ownership and Management		
CommentParks and Associated Beaches						
Obear Park and Beach			Porter Street	8 ac.		
Innocenti ParkParks and RecreationScenic view, sandy beach, swimming, boating, hiking		River Street	4 ac.	Parks and Recreation		
Lighted athletic facilitiesPleasant View Park and Beach	Porter Street	3 ac.	Parks and Recreation	Neighborhood beach, views, boat landing		
Ferry Way Park and Landing	Water Street		0.3 ac.	Harbor Management Authority		
Part of the Inner HarborIndependence Park		Lothrop Street		2.86 ac.		
Lyons Park (Dane St. Beach)Parks and RecreationBreakwater, sandy beach, scenic views	Lothrop Street	7 ac.	Parks and Recreation	Rocky shore, sandy beach, sports fields		
Lynch Park (Lynch and Woodbury Beaches)		Evans Point		16 ac.		
West BeachParks and RecreationRocky shore, sandy beach, playground, stage, scenic views	West Street		West Beach Corp	Open to public except during summer		
Public Landings and Associated I	Beaches					
Draper's Point		River Street	133' wide	DPW Harbormaster		
Tuck Point	Water Street		30' wide	Harbormaster		
Sandy beach with boat landingIndependence Park		Wilson Street	25' wide	DPW, Parks and Rec.		
Beach, sea kayaking, walkway to Lynch ParkWoodbury Street			Woodbury Street	325' wide		
Ober Street Landing/Rice's Beach Harbormaster	Ober Street		57' wide	Harbormaster		
Brackenbury Lane and Beach	Beverly Cove	49'	Harbormaster	Rocky shore small sandy		

Name		Locatio	Size	Ownership and
		n		Management
Sandy beach, limited parking		wide		beach, no parking
Prince Street and Beach	Prince Street	73'	Harbormaster	Limited pedestrian access,
		wide		small beach
Mingo Beach Landing	Hale Street		Harbormaster	

Associated beach is private, scenic view, no parking

B. Inner Harbor

Public access to the Inner Harbor is limited to the City-owned parcel at the foot of Cabot Street and the public walkway associated with Port Marine. The walkway is subject to restrictions based upon the level of activity in the boat yard, has only one entry, and is not continuous. The public way associated with the Tuck Point condominiums also has one entry on Water Street. Public parking is limited, and narrow streets and the intersection of the Veteran's Memorial Bridge ramp with Rantoul and Cabot Street inhibit vehicular circulation.

Lothrop Street/Woodbury Beach

Asserting the public's right to shoreline access has become an issue in the Lothrop Street area and Dane Street Beach/Woodbury Beach area. Between Independence Park and Dane Street Beach, the public traditionally walked along top of the seawall. Residents in this area have over the years blocked the public way with fences or other obstructions. The City has not been able to recapture this public way. Similarly, in the Woodbury Beach area, the walkway continued along the bluff to the beach, although landowners have not recognized its existence. The path has become significantly eroded over the years. To reclaim this access, the city must reach an agreement of accommodation with the shoreline abutters.

Lynch Park to Rice's Beach

A recorded easement over two properties east of Lynch Park has been fenced off. East of this easement, the property owners have obtained a legal decision that the Ancient Highway did not exist along their property. Consequently, Rice Beach is essentially closed except for the portion adjacent to Ober Street.

Hannah Park

This half-acre park is located off the shoreline behind the lighthouse. Although legally City-owned, the Coast Guard has not recognized this ownership and has not allowed public access to the park.

Brackenbury Beach

This is a small beach owned by abutters except for a small strip of public land defined by the width of Brackenbury Lane.

Mingo Beach

Owned by Endicott College, Mingo Beach provides public access to the water that can be difficult, especially at high tide.

C. Shoreline Access Issues

Although Beverly appears to have a number of public shoreline facilities, there are number of issues related to public access that require additional effort on the City's part to ensure legal waterfront access. Much of the public discussion entails interpretation of legal decisions regarding the public's rights to the shoreline. In particular, there has been a traditional custom of Beverly's residents to walk much of the shoreline based upon on ordinance from the 1600's that required a public way along Beverly's shoreline. This way became known as the Ancient Highway. At present, the legal status and physical location of this "highway" is not completely clear or agreed upon by the City and the shoreline residents. To reclaim this access, the city must reach an agreement of accommodation with the shoreline abutters.

Although there are a number of public access points along the shoreline of Beverly's Harbor, some of these sites do not have the facilities to encourage water access, such as Pleasant View Park, or are very limited in size, such as the Prince Street Public Landing. The City has an excellent opportunity to enhance its existing points of public access as well as to expand into other areas, as appropriate.

Issues

- Future of the state Designated Port Area
- Lack of public parking
- Lack of recreational boating opportunities
- Water-edge public walkway
- Landside zoning and commercial/retail development
- Boats at public pier (including water taxis and charter boats)
- Safe navigation around and under the Veteran's Memorial Bridge
- Future waterfront development activities that recognize the City's maritime heritage and provide suitable waterside recreational opportunities
- Use of waterfront parcels including the City property near Veteran's Memorial Bridge and the former Ventron property.
- Public Access near new Veteran's Memorial Bridge
- Public Access at Marina near McDonalds
- New Waterfront Park at the former Ventron Parcel
- Need to focus on Bass River to Lynch Park to Jubilee Yacht Club to Ventron parcel
- Dredging for recreational boating

7. Commercial Activities: Fishing, Lobstering, Cruise Boat, Water Taxi

Beverly has a significant commercial fleet. According to the local harbormaster there are approximately 51 fishing vessels in Beverly Harbor. According to the Department of Marine Fisheries, there are 40 commercial lobster permits the harbor. The City has supported the local seafood industry by dedicating the city marina to commercial fishing and lobstering operations and providing a hoist for movement of seafood and equipment and shore side parking. Other facilities for the fishermen are under consideration and include a bait cooler, a high-pressure wash-down unit, a conveyor system for traps, and other equipment.

Compared to Massachusetts as a whole, Beverly ranked 7th for the total landings by volume in Massachusetts in 1999. In 1995, lobster landings secured by lobstermen based in Beverly totaled 805,035 pounds. This accounted for over 5 percent of the total lobster harvest by all Massachusetts lobstermen. Beverly was ranked fifth in the state for lobster landings in 1996. Many of the lobstermen fish for multiple species during certain portions of the year and use different fishing methods including ground fishing, gill netting, and harvesting sea urchins.

The lobster industry is continuing to change. Total value of the lobster catch increased over 24 percent in the last five years of the 1990's, while the number of traps fished very slightly decreased, along with a more significant decrease in the number of commercial licenses (see the following table). This may lead to several possible conclusions:

- The lobster industry is becoming more efficient in certain ways, the value of the catch is providing an incentive for the efficient ones to remain, and the total number of remaining fishermen is decreasing as a result of competitive pressure.
- If these trends continue, the industry may become further compressed and require further support to maintain and increase the efficiencies.
- The City may be asked to invest in new facilities to maintain this and possibly other fisheries.

The City has also contracted with a private operator for short-term operation of a cruise boat at the City Landing. This operation has been considered as very successful.

Table 3: Beverly Commercial Lobster Industry, 1992-1999

Year	Lobstermen Number	Landings State Rank	Total Pounds	Value
1992	41	10 th	600,109	\$1.8 mil
1993	47	9 th	578,951	\$1.6 mil
1994	46	11 th	728,144	\$2.1 mil
1995	44	9 th	805,035	\$2.6 mil
1996	44	10 th	596,799	
1999	40	7 th	661,046	

Source: Massachusetts Lobster Fishery Statistics, 1990-1999, Division of Marine Fisheries

Table 4: Lobstering Permits

Total State Commercial Lobster Permits	2,206
State Non-Commercial Lobster Permits	11,454
Number of Beverly Commercial Lobstermen	40

Source: 1999, Mass. Division of Marine Fisheries

Table 5: Fishing Employment in Essex County

Fishing	160 people with a \$ 3.1 mill payroll
---------	---------------------------------------

Source: 1997 County Business Patterns

8. Boating and Public Safety

A. Moorings and Slips

The Beverly Harbormaster's Office issues mooring permits. In 1997, there were 859 registered boats located in Beverly Harbor. Boat mooring locations are determined by the harbormaster and are allocated to one of five areas in the harbor (see the following table).

Table 6: Registered Boats in Beverly, 1997

Area	Zone	Moorings	Slips	Rack Storage	Total Boats
Bass River	В	191	11	N/A	202
Inner Harbor	V	178	309	73	560
Lynch Park	L	59	N/A	N/A	59
Outer Harbor	R	83	N/A	N/A	83
Islands	Υ	80	N/A	N/A	80
Total		591	320	73	984

Source: Beverly Harbormaster, 1997

The largest concentration of boats is in the Inner Harbor and the Bass River where there are 330 boats in slips, 320 on moorings and 73 in rack storage. The fewest number of moorings are in the Outer Harbor area where there is less protection from wind, currents, and storms. There are transient moorings located in a cove on the north side of Misery Island. These vessels are often associated with either a public or private waterfront facility as noted in the next table.

Table 7: Vessel Spaces Associated with Waterfront Facilities

Facility	Location	Owner / Manager	Moorings	Slips	Racks
Bass Haven Yacht Club	River Rd.	Yacht Club members	75	-	-
Desmond Boat Yard	River Rd.	Desmond	13	3	-
Bartlett Pier	Webber Ave	Bartlett	6	-	-
Coffey Pier	Webber Ave	Coffey	5	-	-
Commercial Marina	Water St.	BHMA	-	16	-
Glover Wharf Marina	Water St.	BHMA	-	28	-
Port Marina	Water St.	Kinzie	-	251	73
Biarelli Pier	Water St.	Biarelli	-	15	-
Thibideau	Water St.	Thibideau	-	6	
Tuck Point	Water St.	TPMC	-	57	-
Jubilee Yacht Club	Water St.	Yacht Club members	139	-	-
Total			238	376	73

By comparison, in 1994 there were 870 slips and moorings in Beverly Harbor while in 1995 there were 784 registered boats in the harbor and in 1996, 763 registered vessels. The demand for mooring and slip space in the harbor is very strong. There is currently a waiting list of almost 75 boat owners and a waiting period of usually less than one year. Slips are generally more difficult to obtain than moorings.

B. Additional Mooring Areas

At present there are over 850 registered vessels in Beverly of which 483 are on moorings. However, there is a waiting list of almost 100 applicants many of whom desire to have a vessel location as close to the Inner Harbor as possible. There may be opportunities for additional mooring fields within Mackerel Cove or the

Bass River, or an improved mooring layout that would provide moorings for additional and larger vessels. Further study of the feasibility of such possibilities should be undertaken. This would include evaluation of the merits of dredging a portion of the Bass River. In addition, as larger boats and a greater number of boats are brought into Beverly waters, the City must consider different and better mooring layouts to accommodate this change.

C. Waterway Safety

Generally, the harbor is safe for navigation for the commercial and recreational vessels that dominate the water area. However, during morning and late afternoon hours on summer weekend days, the harbor is quite congested with boat traffic. On the other hand, there is a minimum of activity in the late fall, winter and early spring, mostly by commercial fishermen.

Mooring management is the responsibility of the Harbormaster and the boat owners. The harbormaster assigns mooring spaces to the boat owners, which maintain the mooring equipment. The Harbormaster's regulations specify minimum requirements for moorings and equipment, but on-site decisions are necessary to match local conditions.

D. Encroachment of Vessels into the Federal Channel

Well over half of the boat slips in the Inner Harbor are in the Federal Channel. Encroachment into the federal channel remains controversial and is under review by affected agencies. There are currently, no federal permits ("section 10A") issued for encroachment into the federal channel.

9. Multiple Use Inventory

A. Existing Harbor Land Uses

Much of the activity and land use in the harbor area today reflects the changes that have been occurring on the waterfront since the 1960's. The following key land uses are identified on the figure, Existing Harbor Uses included in the Harbor Overview.

Marine Commercial

The waterfront parallel to Water Street between the Veteran's Memorial Bridge and Tuck Point continues to be the center of marine activity, and much of it is oriented to recreational boating and commercial fishing. Port Marine supports hundreds of recreational boat slips as well as a marine service operation. The City supports commercial fishing on its property near the bridge in the Inner Harbor. There are also commercial fishing facilities on the Bass River and a marine services/boatyard.

Residential

Most of the waterfront is low density residential from the Danvers town line up the western shore of the Bass River, from Water Street to the Manchester-By-The-Sea town line, and along the eastern shore of Bass River from Bridge Street to the Ventron site. There are older more dense residential areas adjacent to the inner harbor waterfront. In the 1970's, most of Tuck Point was converted to residential condominiums.

Industrial/Commercial

Much of the area between the railroad tracks and the Bass River along River Street remains industrial/commercial. At present, Boston Gas, Massachusetts Electric and Moynihan Lumber dominate the waterfront south of the bridge.

Recreational

There are numerous public recreation facilities along the shoreline particularly along the Bass River and the Inner Harbor area to Evans Point. There are five public parks and several town landings for boat access. There are also two yacht clubs—one on the Bass River and a second at Tuck Point.

B. Land Use Regulations

Following is a description of the land use regulations impacting use and development of the waterfront:

Waterfront Development District: This zone provides for mixed use and public access development of the Inner Harbor waterfront in Beverly. This zone extends from the Veteran's Memorial Bridge to Water Street. Uses by right include: marinas, restaurants, multifamily dwellings, certain commercial fishing establishments, and accessory buildings. This zone also allows for a density bonus if appropriate public access is provided. This provision may be in conflict with the State's Chapter 91 requirement for public access where development proposed on state tidelands shall provide access.

Flood Plain Overlay Zone: This overlay zone was established to protect "the health and safety of residents of lands subject to seasonal or periodic flooding". All of Beverly's shoreline is within this zone. The zone was also designed to minimize damage caused by future flooding. The district includes flood zone districts designated as Zone A, A1- A30, and zone V and V1 - V30 on Beverly's Flood Insurance Rate Maps and Flood Boundary and Floodway Maps, dated March 18, 1986 and July 2, 1992.

IG General Commercial: This district provides for general industrial, research and office use. This zone is in two locations along the waterfront. The first is the former Ventron site between the MBTA railroad and Congress Street. The second is along the eastern shoreline of the Bass River from the Webber Avenue intersection with River Street to the Bass River Boat Basin.

CG General Commercial District: This district covers a section of the upper Bass River along McPherson Drive and Elliott Street. It provides for suburban and automotive commercial development outside of residential areas. Typical permitted uses are retail, restaurants, hotels/motels and business/professional offices.

R-6 Residential: This district provides for single and two-family development on lots at a 6,000 square foot minimum size. This zone is located in the Goat Hill area between Congress Street and the intersection of Webber Avenue and River Street. Permitted uses include: detached, single-family dwellings; semi-detached and two-family dwellings; historic sites, including museums; and home occupations.

- *R -10 Single Family Residential District*: Allows the development of single-family detached dwellings on 1/4 acre lots or larger. This zone is located from Water Street to Hospital Point, and also along the Bass River and Danvers River to the Danvers city line. Permitted uses include: detached, one-family dwellings; historic sites, including museums; and home occupations.
- *R 45 Single Family Residential*: Allows single-family dwellings on 1-acre lots or larger. This zone is located in two areas, one in the vicinity of Hale Street between Brackenbury Lane and east of Smith Point, and the other in the West Street area. Permitted uses include the same as the R-10 residential district.
- *R 90 Single Family Residential*: Allowing single-family, detached development on two acre or larger lots, this zone is also located in two districts along the shoreline one in the Paine Avenue area and the second near the town line with Manchester-by-the Sea. Permitted uses include the same as the R-45 district.

VI. FEDERAL, STATE, AND LOCAL CONSISTENCY

1. Massachusetts CZM Policies and Tidelands Policy Objectives (301 CMR 23.03f)

This section lists the state and regional policies that are relevant to the Beverly Harbor Plan. These policies provide the framework for intergovernmental consistency in the implementation of the Plan.

A. Relevant Massachusetts CZM Policies

Massachusetts Coastal Zone Management (MCZM) has many policies that relate to land and water uses and resources along the coast. The following regulatory and non-regulatory policies are the most relevant for Beverly Harbor:

Regulatory Policies:

<u>Policy #1</u> - Protect ecologically significant resource areas (shellfish beds, dunes, beaches, barrier beaches, and salt ponds) for their contributions to marine productivity and value as natural habitats and storm buffers.

<u>Policy #3</u> - Support attainment of the national water quality goals for all waters of the coastal zone through coordination with existing water quality planning and management agencies. Ensure that all activities endorsed by CZM in its policies are consistent with federal and state effluent limitations and water quality standards.

<u>Policy #4</u> - Condition construction in water bodies and contiguous land areas to minimize interference with water circulation and sediment transport and to preserve water quality and marine productivity. Approve permits for flood or erosion control projects only when it has been determined that there will be no significant adverse effects on the project site or adjacent or downcoast areas.

<u>Policy #5</u> - Ensure that dredging and disposal of dredged material minimize adverse effects on water quality, physical processes, marine productivity and public health.

<u>Policy #7</u> - Encourage the location of maritime commerce and development in segments of urban waterfronts designated as port areas. Within these areas, prevent the exclusion of maritime-dependent industrial uses that require the use of lands subject to tidelands licenses.

<u>Policy #10</u> - All development must conform to existing applicable state and federal requirements governing subsurface waster discharges, sources of air and water pollution and protection of inland wetlands.

<u>Policy #12</u> - Review proposed developments in or near designated or registered historic districts or sites to ensure that federal, state and private actions requiring a state permit respect their preservation intent and minimize potential adverse impacts.

<u>Policy #13</u> - Review developments proposed near existing public recreation sites in order to minimize their adverse impacts.

Non-Regulatory Policies:

<u>Policy #14</u> - Encourage and assist commercial fisheries research and development, restoration and management of fishery resources, development of extensive and intensive aquaculture, and enhancement on anadromous fisheries, initiated at local, state and federal levels.

<u>Policy #18</u> - Encourage, through technical assistance and review of publicly funded development, compatibility of proposed development with local community character and scenic resources.

<u>Policy #19</u> - Promote the widest possible public benefit from channel dredging, ensuring that designated ports and developed harbors are given highest priority in the allocation of federal and state dredging funds. Ensure that this dredging is consistent with marine environmental policies.

<u>Policy #20</u> - Encourage, through technical and financial assistance, expansion of water-dependent uses in designated ports and developed harbors, redevelopment of urban waterfronts, and expansion of visual access.

<u>Policy #21</u> - Improve public access to coastal recreation facilities, and alleviate auto traffic and parking problems through improvements in public transportation. Link existing coastal recreation sites to each other or to nearby coastal inland facilities via trails for bicyclists, hikers and equestrians and via rivers for boaters.

<u>Policy #22</u> - Increase capacity of existing recreation areas by facilitating multiple use and by improving management, maintenance and public support facilities. Resolve conflicting uses whenever possible through improved management rather than through exclusion of uses.

<u>Policy #24</u> - Expand existing recreational facilities and acquire and develop new public areas for coastal recreational activities. Give highest priority to expansion or new acquisitions in regions of high need or where site availability is now limited. Assure that both transportation access and the recreational facilities are compatible with social and environmental characteristics of surrounding communities.

Plan Proposal – This harbor plan proposes to:

- Fully adopt these policies within the Beverly Harbor Plan;
- The expectation is that the State agencies will provide the technical and other assistance to the City agencies in all future decisions, as presented in these policies.

1. Relevant Chapter 91 Waterways Regulations

Relevant Chapter 91 waterways regulations, discretionary requirements that are eligible for modification or amplification through the harbor management planning process under 301 CMR 23.05 (3)(b) are identified below.

Restrictions on Fill and Structures

To ensure that the development of all tidelands complies with other applicable environmental regulatory programs of the Commonwealth, as provided in 310 CMR 9.32;

Plan Proposal - This harbor plan proposes to:

- Locate the important natural, coastal resources and protect them from development impacts;
- Improve city and state storm water runoff systems to improve water quality;
- Change the City regulations regarding protection of these resources during development and redevelopment projects; and,

 The expectation is that the State agencies will rely on the local database of information and local knowledge of those resources to include in the decision-making processes. In addition, the State agencies will be expected to make improvements to storm drain systems under their control, in concert with other improvements made by the City.

Standards to Preserve Water-Related Public Rights

To preserve any rights by the Commonwealth in trust for the public to use tidelands for lawful purposes, and to preserve any public rights of access that are associated with such use, as provided in 310 CMR 9.35;

Plan Proposal – This plan proposes to:

- Perform the legal research to clarify and further identify public rights-of-way to the waterfront;
- Continue to protect the previously established public ways;
- The expectation is that the State agencies will preserve these same rights, and provide assistance as necessary during the research of further rights.

Standards to Protect Water-Dependent Uses

To preserve the availability and suitability of tidelands that are in use for water-dependent purposes, or which are reserved primarily as locations for maritime industry or other specific types of water-dependent use, as provided in 310 CMR 9.32(1)(b) and 9.36;

Plan Proposal – This plan proposes to:

- Change the zoning of the land along the Inner Harbor and the Bass River to specifically and clearly support water-dependent uses.
- The expectation is that the State agencies will support and rely on this rezoning for decisions on land use permits.

Engineering and Construction Standards

To ensure that all licensed fill and structures are structurally sound and otherwise designed and built in a manner consistent with public health and safety and with responsible environmental engineering practice, especially in coastal high hazard zones and other areas subject to flooding or sea-level rise, as provided in 310 CMR 9.37;

Plan Proposal – This plan proposes to:

- Improve the conditions of the city-owned, shorefront structures within the Inner Harbor.
- To require the improvement of private structures associated with new construction.
- The expectation is that the State agencies will also improve state facilities to the same standards.

Use of Standards for Recreational Boating Facilities

To ensure patronage of public recreational boating facilities by the general public and to prevent undue privatization in the patronage of private recreational boating facilities, as provided in 310 CMR 9.38; and to

ensure that fair and equitable methods are employed in the assignment of moorings to the general public by harbormasters as provided in 310 CMR 9.07;

Plan Proposal – This plan proposes to:

- Allow creation of new boating facilities with stipulations on the distribution of the created spaces to the general public.
- Continue the methods and procedures of distribution of spaces to the public established by the Harbor Master.

Standards for Marinas/Boatyards/Boat Ramps

To ensure that marinas, boatyards, and boat launching ramps are developed in a manner that is consistent with sound engineering and design principles, and include such pumpout facilities and other mitigation measures as are appropriate to avoid or minimize adverse impacts on water quality, physical processes, marine productivity and public health, as provided in 310 CMR 9.39;

Plan Proposal – This plan proposes to:

- Consider all mitigation measures in the construction of new boating facilities.
- Improve the coordination between the Harbor Authority and the City land use and environmental boards when making decisions on new boating facilities.

Standards for Dredging

To ensure that dredging and disposal of dredged material is conducted in a manner that avoids unnecessary disturbance of submerged lands and otherwise other avoids or minimizes adverse effects on water quality, physical processes, marine productivity, and public health, as provided in 310 CMR 9.40;

Plan Proposal – This plan proposes to:

- Consider other methods of dredging, such as subsidence dredging, to reduce the movement of polluted sediments.
- Find disposal areas to discharge the sediments.
- The expectation is that the State agencies will facilitate the alternative methods of dredging, if chosen, and not unduly restrict those methods.

Conservation of Capacity for Water-Dependent Use

To ensure that non-water-dependent use projects do not unreasonably diminish the capacity of any tidelands to accommodate water-dependent uses, as provided in 310 CMR 9:51;

Plan Proposal – This plan proposes to:

- Change the zoning of the land along the Inner Harbor and the Bass River to specifically and clearly support water-dependent uses;
- The expectation is that the State agencies will support and rely on this rezoning for decisions on land use permits.

Use of Shoreline for Water-Dependent Purposes by Non-Water Dependent Use

To ensure that non-water-dependent use projects on any tidelands devote a reasonable portion of such lands to water-dependent use, including public access in the exercise of public rights in said lands, as provided in 310 CMR 9.52;

Plan Proposal – This plan proposes to:

- Include within the zoning changes, the standards for water dependent uses and public access, and supporting land uses that create and active and important public access. The zoning will encourage recreational boating facilities on both the landside and waterside.
- The expectation is that the State agencies will accept the provisions of water dependent uses, public access, and supporting uses that are environmentally and financially viable.

Activation of Commonwealth Tidelands for Public Use

To ensure that non-water-dependent use projects on Commonwealth tidelands, except in Designated Port Areas, promote public use and enjoyment of such lands to a degree that is fully commensurate with proprietary rights of the Commonwealth therein, and which ensures that private advantages of use are not primary but merely incidental to the achievement of public purposes, as provided in 310 CMR 9.53.

Plan Proposal – This plan proposes to:

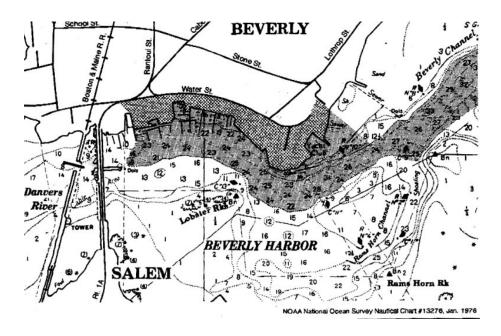
- Leave single-family residential areas only for passive access as may be provided by state law, except for those area of public rights-of-way and public land.
- Rezone all of the commercial and industrial zoned land on the waterfront with zones that include the provisions for public access, recreational boating facilities and supporting commercial uses.
- Use City-owned property in the Inner Harbor to significantly increase access and waterdependent activities within the area.
- The expectation is that the State agencies will support the redevelopment efforts to change these areas to improve the public use and enjoyment of the Harbor.

APPENDIX I. DESIGNATED PORT AREAS

Designated Port Area

The Designated Port Area (DPA) program is a state-level initiative that was created in 1979 as part of the state's Coastal Zone Management Program. As stated in the state program, "Designated Port Areas in their entirety are priority areas for state and federal funding of maritime industrial uses." The purpose of the DPA program is to preserve maritime industry by protecting areas that have:

- Waterway and waterfront developed for commercial navigation.
- Land area conducive to siting industrial uses.
- Land based transportation and utility services that support industrial.



State CZM designation of DPA (shaded areas)

A. State Designation of Beverly Harbor DPA

Program Development

In 1979, the program included the designation of 12 designated port areas (DPAs) throughout the coastal region that fit the basic criteria for the program and would be subject to the program requirements. In 1984, Massachusetts passed legislation for the Department of Environmental Protection to have license authority over filled tidelands within the state. This was the Chapter 91 licensing program, which provided new powers recognizing that the actual ownership of the tidelands, whether filled or still open. As a result, much stronger regulatory authority was instituted over the coastal areas than under previous legislation.

In 1990, the DPA regulations were amended to prohibit non-industrial uses as a means to better protect these areas for future marine industrial uses, which could not compete with the higher value uses in the market place. In 1994, the DPA regulations were further revised to include:

- Uniform procedures for proposed changes to the DPA boundaries.
- An allowance for uses that were supporting the marine industrial uses but that may not fit the definition of marine industrial.
- A DPA Master Plan process that is coordinated with the Municipal Harbor Planning process.
- An allowance for Marine Industrial Parks that may include a variety of uses.

As a result of those changes, the current regulatory framework for all coastal areas includes both the Massachusetts Coastal Zone Management office and the Department of Environmental Protection offices that regulate uses and activities under:

- 310 CMR 9.00 (Waterways)
- 301 CMR 23.00 Municipal Harbor Plans
- In addition, that portion of the Inner Harbor within the DPA designation falls under state regulation 301 CMR 25.00 for Designated Port Areas.

Local Regulation

The City of Beverly further regulates all coastal land under local zoning (see Land Use section), as enabled through state law. The DPA, for the most part, is the same area as the Waterfront Development (WD) district. However, a small portion of the DPA appears to also include a residential area.

Allowed and Disallowed Uses

Generally, DPA regulations allow water-borne commerce, port operations, mine construction and waterway-based production. Under the state regulations (310 CMR 9.12 (b) Definitions), the Marine Industrial Uses are listed as follows:

- Marine terminals and related bulk storage
- Commercial passenger vessels
- Manufacturing using bulk transport on water
- Commercial fishing and processing
- Boatyards and dry docks for vessels and structures
- Marine construction and port operations
- Navigation aids and shoreline structures
- Hydroelectric power

The regulations go on further to define those uses that are specifically not allowed within the DPA's. Those 'Categorical Exclusions' are:

- Residential dwellings
- Transient guarters such as hotels, nursing homes, and hospitals
- Recreational marinas and boating facilities not allowed to be built or expanded
- Amusement parks, entertainment or sports complexes

New buildings devoted to office use. However, the regulations do allow 'accessory uses' that
are not marine industrial but support those uses.

Accessory uses are listed as:

- Uses customarily associated with, and necessary to accommodate, the principal use. These could include such things as office space for on site personnel.
- Uses integral in function to the water-dependent use. These possibly could include non-water dependent industrial operations.
- The use provides related goods and services such as a broker.

The standards that the regulations apply to these supporting or accessory uses are that the uses must provide direct economic or operational support to water dependent industrial use and that the footprint size of the use cannot exceed 25% of the combined square footage of all filled tidelands in the project site.

Public Access is a key program goal of the state's Coastal Zone Management Program. Although public access could conflict with the marine industrial (or any industrial) operations, some allowance for public access within the DPA's is provided under certain standards:

- Pedestrian access structures, so long as they are not constructed on new fill, are categorically eligible, and
- Allowed as small-scale facilities that provide public access and promote public awareness of working waterfront activities. This means they allow people to observe the working waterfront.

The benefits of the DPA designation generally mean:

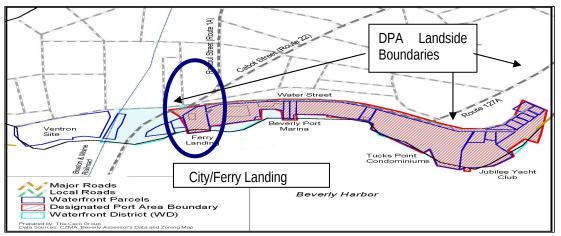
- Controls on redevelopment focused on water-dependent industrial uses.
- Support for commercial fisheries, which are still viable.
- Allows State agencies to be used to control and negotiate land use changes.
- Allows special section to be included in the Harbor Plan.

If included in the Harbor Plan, a DPA designation plan must include:

- Extensive waterfront land area reserved for water-dependent industry,
- Must control non-port uses,
- Must specify limits on non-marine commercial uses to no more than 25% of the total site area,
 and
- There must be economic and infrastructure support to the marine industrial uses.

Land and Water Use within the Beverly DPA

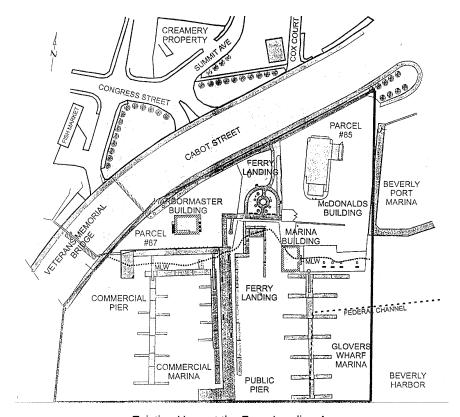
The land area within the Beverly DPA is divided into five general areas: Ferry Landing, Beverly Port Marina and adjacent parcels, Tuck Point Condos, the Jubilee Yacht Club, and the boat ramp and beach at the end of Water Street. Below are summaries of each area.



Ferry Landing

The public landing is about two acres in size within three parcels. One of those parcels is within the DPA. That parcel was previously developed with a McDonald's restaurant but is now owned by the City. Buildings on the site include:

- Harbormaster (2-stories, 2,430 sf),
- Marina building (2.5 stories, 2,887 sf) with residential on upper floors, and
- The former McDonald's building



Existing Uses at the Ferry Landing Area

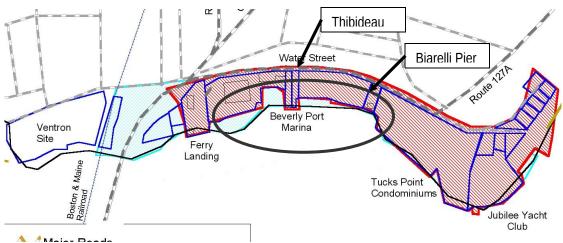
Boating facilities include 28 recreational slips, 16 commercial slips, and the public pier. The public pier and commercial slips lie outside the DPA. The DPA includes the recreational slips and marina building. A new commercial/tourist boat service, Salem Whale Watch & Cruise Co., has been granted a short-term lease at the City's commercial pier. Although this is the only use that conforms to the state DPA standards, it is not within the DPA. The DPA landside boundary stops at approximately the 20' depth within the adjacent federal channel. Support facilities include 58 parking spaces and land under the Veteran's Memorial Bridge, which are both outside of the DPA.

Beverly Port Marina

The Beverly Port Marina is about 6.3 acres in size within five parcels as shown on the Assessor's maps. The majority of the land is used for the recreational boating support operations.

Buildings on the site include the Port Marina barn, and several smaller out buildings. Boat storage, parking, and travel areas occupy a significant portion of the remainder of the site.

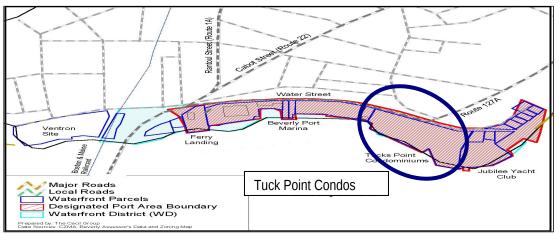
Boating facilities include the land-based operations as noted above and 73 boat storage racks. There are 193 slips associated with the Port Marina and 15 slips associated with the Biarelli Pier at Mike's Lobsters. The Thibideau property, also used for water-related uses lies between these two parcels.



Tuck Point Condos

Tuck Point Condominiums is listed on the local records as 106 units that were built in the mid 1980's. They are built on about 4.8 acres in one parcel.

The marina in front of the condominiums is not associated with the condo units. It is for private recreational boats and contains approximately 100 slips.



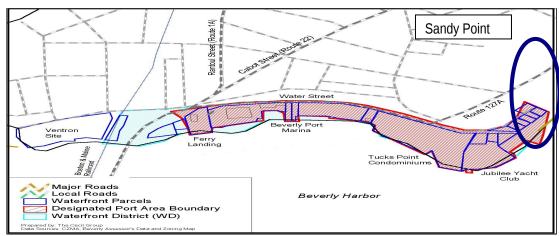
A public right of way to and along the waterfront (on the waterside of the condos) starts at Water Street, with signed access from the street located next to Mike's Lobsters.

Jubilee Yacht Club

The yacht club is on about 2.2 acres on three parcels at the end of Water Street. It has landside facilities for about 250 recreational boats and the members utilize about 142 moorings in the harbor.

Sandy Point

The Sandy Point public beach and boat ramp is about 5.7 acres in size. The Essex County Sewage District operates a sewage pump station on a portion of the land. Single-family residential units may be located in part of the DPA.



DPA Performance

There are no water-dependent industrial uses in the DPA with the possible exception of Mike's Lobsters. Consequently, the DPA is not performing in accordance with the goals of the state program. Below are some findings regarding the conflicts and program needs that are not being met.

Land and Water Use Conflicts

The current regulations as established by the City and the State are not in conformance with each other:

- The City WD district allows public access as the water-dependent use for conformance. The DPA regulations do not allow this as the primary water dependent use.
- Part of the DPA appears to cover residential-zoned land. The DPA regulations do not allow this use.
- The City regulations allowed the construction of the condominiums, which again are not allowed in the DPA as a primary use.

In addition to the regulations, the existing land and water uses are creating other conflicts:

- The public pier and commercial fishing slips at Ferry Landing lie outside the DPA. The DPA includes the recreational slips and marina building. The new commercial/tourist boat service was granted a short-term lease is in conformance with the state DPA standards and within the DPA. However, it is a temporary use at this time.
- The majority of the Beverly Port Marina is used for recreational boating and support operations. The landside facilities may provide support to commercial boats as well. The only 'marine industrial' use is the seafood operation; Mike's Lobsters.
- As noted, the Tuck's Point condominiums are not an allowed primary use of the DPA. DPA regulations only allow uses that are either water-dependent or support water-dependent uses.
 Housing units and residential facilities are categorically excluded from DPAs (310 CMR 9.12 (2) (e) (5)).
- Jubilee Yacht Club is used for recreational boating, which is also categorically excluded from the DPA.
- The single-family residential properties on Silver Court Street do not conform to the goals of the DPA.
- The use of almost all of the slips and water sheet for recreational boating does not conform to the DPA goals and standards.
- Of the 21 acres of land within the DPA, only 0.15 acres is primarily used for marine industrial uses; Mike's Lobsters.
- Of the equal area of water sheet and the adjacent federal channel, almost all is used for recreational boating.
- The Beverly commercial fishing fleet at the City Landing lies outside of the DPA and within waters more shallow (about 10 to 14 feet deep) then the DPA program goal, which is about 20 feet deep.

Conflicts with State Program Goals

The development and use of land within the DPA has created certain conflicts with the state program goals. As found here;

- A very limited number of land uses conform to the goals and standards of the DPA.
- A very limited number of water sheet uses conform to the goals of the DPA.
- Some conforming uses are located outside the DPA and are not protected by that program.

- The City's infrastructure does not support industrial access.
- Regulatory requirements are not dependent on DPA designation.
- The area available within the DPA is very limited for modern industrial uses.

Existing Protections

The DPA is the most significant program for protection of water-dependent industrial uses. However, the DPA designation and its performance do not impact the other regulatory standards in place, or create special conditions that are necessary to protect the public goals and public trust. As previously noted, the Chapter 91, Wetlands and Waterways regulations, and municipal plans and zoning regulations provide several layers of protective control on the land and water areas for non-industrial maritime uses.

The real estate market does not protect maritime industries, and market forces will change land uses to non-industrial uses. However, this is one of the key reasons the DPA program was established. The DPA is meant to foster and preserve maritime industrial uses that are rarely able to compete for entry into waterfront areas.

Relation to the Federal Channel

As noted previously, recreational boat slips constructed by private operations have encroached upon the federal channel. In addition, the channel is 225-feet wide with a controlling depth of 19 feet as reported in April 1986. This is more constrictive than other commercial channels in this area, such as the Gloucester channel, which is 450 feet wide, with depths of 20 to 22 feet.

Methods for Modification of the DPA

Because the City of Beverly has no significant reason to keep the DPA designation as it is now, the City should consider options for the DPA including modification or elimination in favor of other regulatory coverage, such as a Waterfront District zoning designation. For example, there is an option to change the Designated Port Area boundary by eliminating the Tuck Point Condominium property from it. A change in the Beverly DPA boundary would result in a DPA that is more consistent with the allowable DPA uses. Should the City of Beverly decide to change the boundaries of its DPA, there are four options under state law and Chapter 91 regulations (310 CMR 9.00).

Method 1: State agencies unilaterally remove the DPA designation

The Coastal Zone Management office of the state could initiate an administrative process to analyze the properties within the DPA and amend the district boundaries in accordance with their new findings.

Method 2: Legislation to remove the DPA designation

A bill that de-designates the Beverly DPA would have to be passed and approved by the Secretary of Environmental Affairs as well as the state legislature. The exact process for de-designation should be confirmed with the state representatives.

Method 3: Revisions in the Regulations for Designated Port Areas (301 CMR 25.00)

This would require alteration of the regulations regarding the criteria for changing boundaries of the DPA. The current regulations effectively eliminate the possibility of a change to be approved. A new regulation would be proposed that would add new criteria and allow the relocation of a boundary if it is found that there is an overriding municipal goal served by the relocation, as documented through a Municipal Harbor Plan. It seems that a change in the regulation could be accomplished as an administrative procedure in a relatively short time. The procedure would likely require a public hearing and public input.

Method 4: Revisions in Ch 91 Regulations Regarding Definitions of DPA Supporting Uses (310 CMR 9.00) This option would change the definition of uses within the state regulations to those allowed as "supporting" a DPA. Non-water dependent and non-industrial uses are permitted to occupy up to 25 percent of the land area of a DPA if they "support" (financially or otherwise) the industrial port uses. The development of "supporting uses" is allowed through approval of a DPA Master Plan. An administrative process would be required to make this change, similar to that discussed above.

Method 5: Variance from Chapter 91 Regulations (310 CMR 9.00)

This option would provide for an approved variance from the regulations by the DEP Commissioner for specific projects to proceed, even though it would not be normally permissible. The existing Chapter 91 variance regulations allow issuance of a variance due to an "overriding municipal interest". The DEP Commissioner must also find that "there are no reasonable conditions or alternatives" that would allow a project to proceed in compliance with the Chapter 91 regulations (310 CMR 9.00).